B. C. HYDRO
HOMATHKO DEVELOPMENT
GENERATION

PRELIMINARY HERITAGE INVENTORY AND ASSESSMENT

by

Richard Blacklaws
Stephan Fuller
Carol Trauman
Heritage Research Group

PLEASE NOTE

This Preliminary Heritage Inventory and Assessment report contains information available as of October 1983. Some information may be incomplete and is subject to amendment as a result of subsequent studies.

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HERITAGE ASSESSMENT PROGRAM CREDITS

Project Director:	Richard Blacklaws
Field Research:	Richard Blacklaws Stephan Fuller Vance Hanna Carol Trauman
Report Authors:	Richard Blacklaws Stephan Fuller Carol Trauman
Cartography:	Carolyn Donnelly Carol Trauman
Report Editor:	Stephan Fuller Cordillera Environmental Projects Ltd.
Word Processing:	Susan Munro Gardner, Peepre & Associates Ltd.

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EXECUTIVE SUMMARY

This report describes the results of a preliminary heritage inventory and assessment program as part of studies for the B. C. Hydro Homathko Development. Four goals were achieved:

1) Preliminary ranking of heritage resource potential (completed by B. C. Hydro Environmental and Socio-Economic Services Department) was evaluated in the field and appropriate adjustments were completed;

2) B. C. Hydro exploratory drilling sites constructed during the summer of 1982 have been field checked and the potential heritage impacts were assessed;

3) A preliminary understanding of the spatial distribution of heritage potential within the study area has been achieved; and

4) Waddington's Wagon Road has been flagged, mapped and photographed. Physical trail evidence has been inventoried.

Operating under permit number 1982-28 issued by the B. C. Ministry of the Provincial Secretary and Government Services, Heritage Conservation Branch, the preliminary study employed a four-person field crew for a combined total of 104 person-days. Based at the B. C. Hydro Tatlayoko exploration camp, the heritage study team used helicopters, boats and 4WD vehicles to complete field surveys, mapping, and local historic studies.

The field survey methodology consisted of a systematic survey of the study area to assess a previously assigned heritage site occurrence potential, complemented by a limited random sample program of the Tatlayoko Lake shoreline. All survey areas were traversed and sampled for evidence of past cultural activity. Additional surveys occurred in areas selected on a subjective basis; naturally eroded exposed sites, sites with current human disturbance, and view sites. Field assessment of exploratory drill sites was undertaken as requested in accordance with Heritage Conservation Branch Guidelines.

In total, 29 heritage sites were located. Of these, 9 are historic and 20 prehistoric. Each of these sites was mapped, recorded on B. C. Archaeological Site forms, and briefly assessed with regard to its significance, content, and condition. Detailed discussion or evaluation of site significance will not be possible until further detailed studies are undertaken.

The study area for the B. C. Hydro Homathko Development occupies an area of low potential heritage site occurrence. Within this region there are select areas possessing medium and high heritage site potential. Medium sites include the confluences of major streams or rivers and the shores of Twist Lake and Lowwa Lake. Regions with high heritage potential include the north end of Twist Lake, the ends of Tatlayoko Lake and select sites along its shoreline, Waddington Canyon, and the Bowl Lake region.

The 1982 inventory and assessment program provides a preliminary understanding of the heritage resources located within the Homathko Development Area. This preliminary study has identified specific areas that will require detailed

inventory and assessment if the Homathko Development proceeds beyond its current exploratory/feasibility stage of investigation. These specific areas are:

1. The Tatlayoko Storage Project drill sites;
2. The north and south ends of Tatlayoko Lake and selected sites along its shoreline;
3. The north end of Twist Lake;
4. Local informant studies and ethnohistoric program.

1. INTRODUCTION

British Columbia Hydro and Power Authority is currently undertaking feasibility studies for a new hydroelectric generation facility on the Homathko River. This development consists of four dam projects: the Tatlayoko storage project; Nude Canyon project; Mosley Creek project; and Waddington Canyon project (see Figure 1).

The Tatlayoko water storage project earthfill dam will be located near the south end of Tatlayoko Lake. This development would raise the lake level 9 metres with a potential future drawdown of 10 m. The Nude Canyon project dam would be located 2 km downstream of the confluence of Nude Creek and the Homathko River and connected by tunnel to a powerhouse that jointly services the Mosley Creek dam project. The Mosley Creek dam project would be located 13 km upstream of the confluence of Mosley Creek and the Homathko River. The Waddington dam project would be situated 800 m upstream from the Klattasine/Homathko confluence. Access routes for project construction would require both up-grading of existing roads and the building of new roads. The location of these roads has not been determined.

At this time, it is understood that the Homathko Development is in feasibility planning stages. As such, the specifications of the Development are subject to change. The earliest expected date for power generation from this development is 1997. Project feasibility studies and exploratory activities at the four project sites are now underway. Preliminary assessment of heritage, fisheries and wildlife resources have been initiated in conjunction with this exploratory program.

In September of 1982, the HERITAGE RESEARCH GROUP undertook, on behalf of B. C. Hydro, a preliminary in-field heritage inventory and assessment program, the results of which are presented in this report.

2. PROJECT SETTING

The Homathko Development study area is located approximately 235 km east of Williams Lake and 31 km south of Tatla Lake. The total area straddles the western edge of the Chilcotin Plateau and the eastern edges of the Coast Range (Figure 1). The plateau landscape is characteristic of the Chilcotin Plateau. Ranging from 944 m to 1,097 m in elevation and in the west the alpine areas range up to 4,236 m.

2.1 Geology

The geological history is relatively complex and poorly understood. Mountain building occurred during the Jurassic and Cretaceous period when most of the granitic batholiths of the Coast Mountains were intruded (Bates 1972). Denudation and erosion of the uplifted land surface continued through the 60 million years of the Cretaceous and Eocene, during which time the granitic cores of the then present mountains were reduced to a plain. The land surface was probably one of relatively low relief. During the Miocene, extrusions of lava covered the old surface with volcanic rock (Weir 1964). During the Tertiary the low relief land forms were uplifted along two axes, one running northwest to southeast and the other oriented almost due north-south. Mt. Waddington lies at the intersection of these two axes of uplift.

2.2 Drainage

Drainage patterns are controlled by two geologic features. The Mosley Creek Valley is structurally defined by the normal

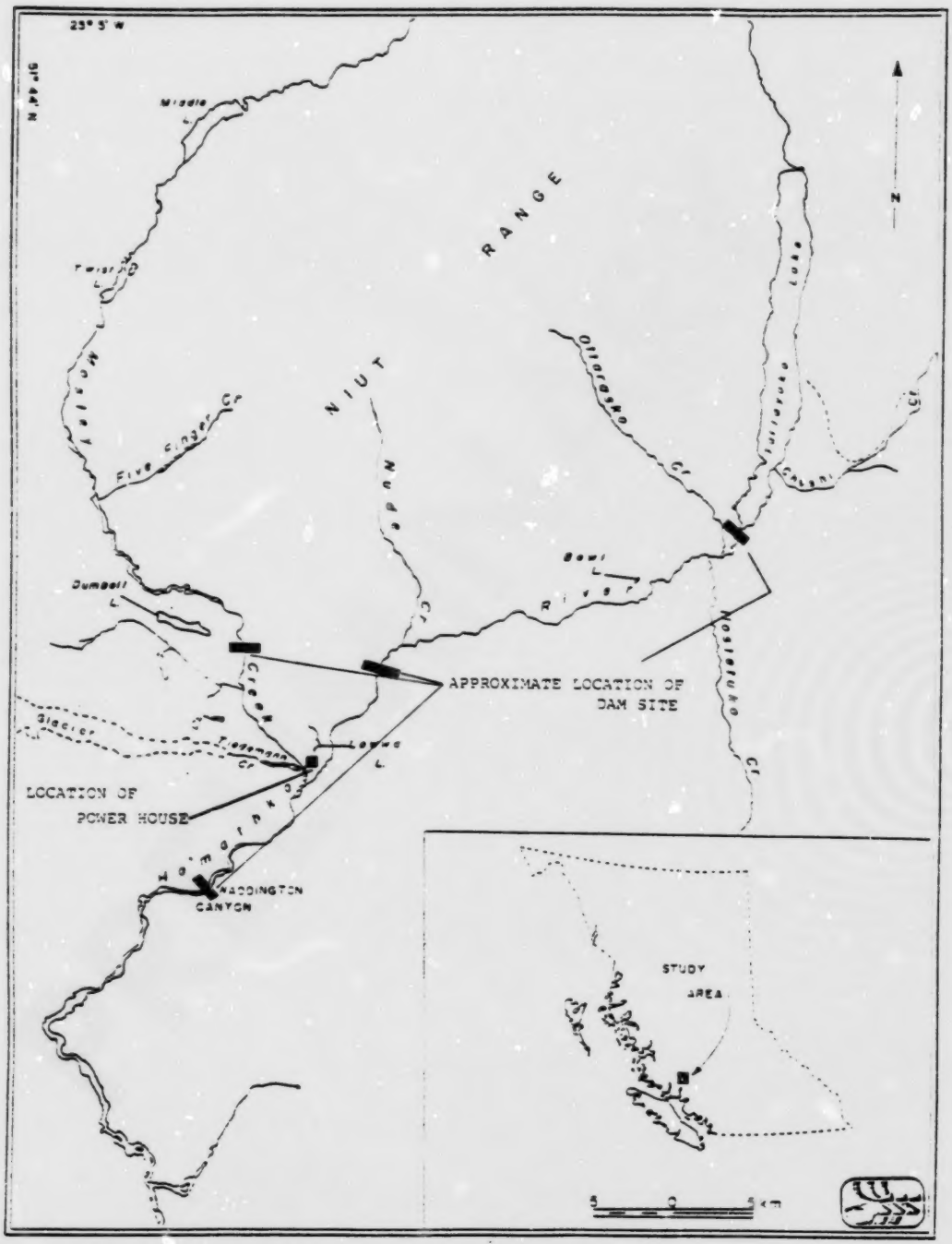


Figure 1; Homathko Development Location Plan.

faulting seen in the east end of the valley, which occurred during the Late Cretaceous and Early Tertiary (Tipper 1971). Holland (1964) suggests that the Homathko River is an antecedent feature and is a product of stream erosion in the Coast Mountains during the Tertiary uplift and before the recent glaciations.

2.3 Geomorphology

The present topography is primarily a product of the erosional and depositional components of Quaternary glaciation. During the Pleistocene, Cordilleran ice moved from the Coast Mountains in a northeasterly direction, evidenced by morainal deposits within the Tatlayoko Valley. As evidence of glaciations occurring earlier than the Fraser Glaciation are scant, it is likely that the present glacial features are the result of the Fraser Glaciation (Tipper 1971). Erosional microfeatures abound with excellent examples of glacial rasp and polish being found above Waddington Canyon.

The soil parent materials consist, for the most part, of Pleistocene and recent tills and glaciofluvial sediments, although outcrops of the younger volcanic rocks occur.

2.4 Biogeoclimatic Features

Biogeoclimatic features vary markedly through the study area. On the wetter western side along the lower Homathko River the vegetation is characteristic of the Coastal Western Hemlock Zone flanked by the Mountain Hemlock Zone at higher elevations. The drier Chilcotin Plateau around Tatlayoko Lake supports the Interior Douglas-fir Zone (IDF) flanked by the

Englemann Spruce-Subalpine Fir Zone (ESSF) at higher altitudes. A large portion of the study area above 2,000 m is classified as Alpine Tundra (Annas and Coupe 1977).

The Coastal Western Hemlock Zone and the Mountain Hemlock Zone are under coastal climatic influence and supports Western Hemlock, Western Red Cedar, Amabilis Fir, Douglas-fir and Spruce spp. with Mountain Hemlock, Amabilis Fir and Subalpine Fir at higher elevations. Edible plants include a variety of Vaccinium spp. (blueberry and huckleberry). There is little evidence that these zones supported anything more than transient aboriginal populations which were primarily interested in coastal fish resources.

The IDF and the ESSF zones at higher elevations supported larger aboriginal populations. The Tatlayoko Lake area is a wetter transitional form of IDF(b) with a Douglas-fir/Pine association being the climatic climax. This is interspersed with Lodgepole Pine, Aspen, White Spruce and Cottonwoods. There is a relatively unique association of Douglas-fir and Subalpine Fir in areas along the east side of Tatlayoko Lake and the Stikelan Pass area. These are believed to be a result of unique climatic conditions. Numerous edible plants and shrubs include Saskatoon berries, Juniper, Gooseberry, Soapberry, Wildrose, Wild Strawberry and Kinnikinnick.

The soils of this area are developed on medium textured morained deposits and generally classified as Grey Luvisols with low organic contacts.

Wildlife resources include moose, mule deer, bear, wolves,

mountain goats, and cougars. There is good to excellent deer and moose habitat throughout the area. In particular, the Douglas-fir/pine/grass association along Tatlayoko Lake is critical mule deer habitat during heavy snow winters. The Mosley Creek provides extensive moose habitat.

At higher elevations above the IDF zone is a wet subzone of the ESSF zone. Lodgepole Pine, Subalpine Fir and Engleman Spruce are common, the latter two particularly on the wetter sites. The herb layer is well developed including Vaccinium spp. and a type of wild potato (Claytonia lanceolata) which until recently formed an important local food resource. This potato plant is found on the east side of Tatlayoko Lake in the Potato Range. Wildlife includes moose, mule deer, mountain goat, big-horn sheep, grizzly bear, black bear, wolves and cougar. Upland game birds such as ptarmigan and grouse are plentiful.

The Alpine Tundra Zone reaches into the higher elevations above treeline in the Potato Range, in the mountains that separate the Homathko, Mosley Creek drainages and in the numerous high glaciated peaks such as Mt. Queen Bess, Mt. Waddington and Mt. Mundy.

2.5 Ecological/Cultural Relationships

Given our understanding of the derivation of the geomorphological and biogeoclimatic characteristics of the region, it seems unlikely that the region has ever supported larger aboriginal populations than have been noted ethnographically and historically. Post-glacial exploitation of area resources will have grown slowly, with the first influx

of these peoples presumably within the past 5,000 years. Exploitation for game would have provided the first visits to the area. Utilization of plant species for food and the valley corridors for trade and travel would have been subsequent developments. Exploitation of fisheries likely accompanied the reestablishment of various runs on an individual basis.

The post-glacial reestablishment of vegetation and ungulate range in particular in this area is not well documented, but it is likely that the populations of deer and sheep will have varied significantly with herd size. The size of these herds will have been much more closely related to predator/prey interrelationships and short-term climatic fluctuations than to the long term fluctuations. Unfortunately we generally only have information about the latter. Information about the carrying capacity for aboriginal populations within the study area will be therefore partly based on inference from biological studies and from the results of future archaeological research.

3. HERITAGE OVERVIEW

3.1 Previous Heritage Research

Heritage studies within the western Chilcotin are relatively recent in comparison to the rest of British Columbia. This fact reflects the poor road access to the region as well as the minimal material culture retained by the archaeological record. Typically, central interior sites are not stratified and do not exhibit complex subsurface components. Within the last two decades however, and specifically in regard to the Chilcotin region, archaeologists have become interested in the research of such problems as prehistoric migrations, cultural change/displacement theories and how they may be reflected within the archaeological record (Mitchell 1970a and 1970b, Wilmeth 1978, Matson 1980, Mayne 1982).

As a result of this new interest, recent work has been undertaken to determine if ethnic identity is reflected in the lithic (stone) industry recovered from an archaeological site. The question now asked by archaeologists is: "Can it be determined whether a projectile point or artifact complex has the attributes of, or "speaks" Athabascan (Chilcotin) or Salish (Shuswap)?". The investigation of this problem has been the underlying instrumental force in the formulation of heritage studies in the western Chilcotin (Wilmeth 1978, Matson 1980, Mayne 1982).

The Chilcotin people represent the southern limit of contiguous Athabascan habitation. The word contiguous is required here as other speakers of the Athabascan language do exist farther

south, disconnected from the parent stock. These people are the Nicola from the Merrit area and also the Navaho and Apache from the American Southwest. It is believed that the ancestors of these people separated from their northern parent Athabascan stock sometime around 700 A.D. and moved southward. It is believed that the Chilcotin's southern movement into their present area of occupation probably occurred from the north, during the same period (Wilmeth 1978).

If this cultural displacement occurred, one should be able to identify a distinctive change in the material culture close to the suspected separation or migration date of 700 A.D. This research question led to investigations in the Anahim Lake area by Wilmeth (1977, 1978), in the upper Blackwater River by Donahue (1977), and more recently in the central Chilcotin by Matson (1980). The evidence recovered by these researchers supports the assumption of a significant cultural change occurring during the expected time period. The early period in the cultural history contains a lithic microblade technology which has been correlated with a possible Salish cultural tradition isolated and identified by Sanger in the Lochnore-Nesikep area (Wilmeth 1978), whereas the later cultural material affiliates with more recent Athabascan complexes found in north-central B. C. However, it must be realized that these findings are still preliminary, and much more proof is required before it is accepted by the general academic community.

The most recent and intensive heritage studies conducted within the Chilcotin region reflect the relevance of this research problem. Matson and students at U.B.C. have conducted extensive investigations in the Eagle Lake area. It is

important to realize that the Eagle Lake to which Matson refers is actually Choelquoit Lake. Matson's use of Eagle Lake represents a local idiom. However, to maintain geographic consistency and not to confuse Choelquoit Lake with the Eagle Lake located just to the north, the proper names will be used for all lakes. Choelquoit Lake is situated north of the northern limits of the Homathko Development study area. This research was designed to identify and describe Chilcotin (B. C. Athabascan) settlement and artifact patterns so they could be identified and separated from Interior Salish (Shuswap) collections.

3.2 Cultural History

3.2.1 Chilcotin (ethnographic)

The study area lies wihin the traditicnal territory of the Chilcotin Indian people (see Figure 2). The Chilcotin people speak a language of the Athabascan linguistic family. The Chilcotin people represent one of the southernmost speakers of the Athabascan family. The term Athabascan is applied, in a general sense, to identify a people who inhabit a land area extending from central British Columbia to the Yukon and Alaska. These people share a common language and a common boreal forest socio-economic adaptive strategy. However, on a local level, there are distinct dialect and socio-economic differences. These differences are used to identify regional Athabascan groups which are affiliated with specific territories with specific socio-economic attributes. The Chilcotin people represent a distinct linguistic and ethnic entity, separate from Carrier, Shuswap or Coast Salish.

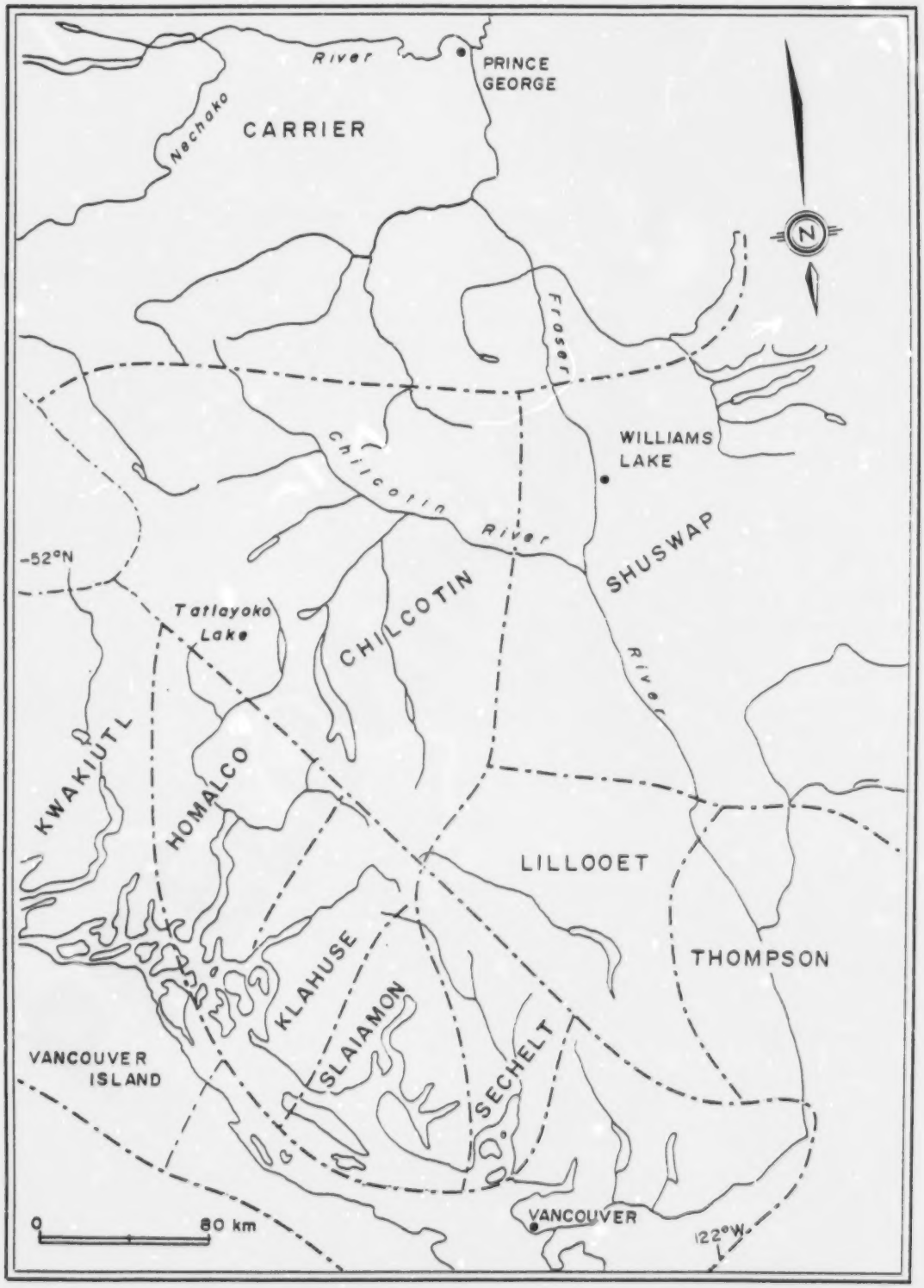


Figure 2; Ethnographic mosaic of the west central British Columbia (adapted from Matson 1980).

The area occupied by the Chilcotin people is circumscribed by the drainage of the Chilcotin River. North of the Chilcotin were the Southern Carrier people, linguistically and culturally their closest neighbours. These people occupied the Blackwater drainage from the Ulgatcho area in the west to the vicinity of Quesnel in the east. To the south were the Interior Salish-speaking Shuswap. This group occupied the west bank of the Fraser "...as far as the divide between this river and the Chilcotin and Nazko drainage to the west." (Teit 1909). The traditional territory of the Shuswap ran from the present-day town of Hanceville east to the Fraser River. The southern boundary ran west from Ground Hog Mountain and along the divide between Bridge Creek and the Taseko River and Big Creek to the Coast Range. For all intents and purposes, the Coast Range formed the western boundary for the Chilcotin between themselves and the Coast people of Kwakiutl affiliation (mouth of Kleena Kleene), Homalco (Homathko River), Coast Salish, Bella Coola affiliation.

The area presently occupied by the Chilcotin people has undergone significant changes since contact with Europeans (ca. 1860). Their territory has shifted to the east, along the Chilcotin River, as well as north to the Alexandria area along the Fraser River. The Carrier have displaced the Chilcotin in the Anahim Lake area but circumstantially, Chilcotin have displaced Carrier people from Alexandria.

Factors responsible for this eastward shift in Chilcotin population include such variables as pressure due to the discovery of gold on the Fraser River, commercial trading outlet and cash employment opportunities, and smallpox significantly decreasing in number the Shuswap people who had

previously occupied the land between Hanceville and the Fraser River. Chilcotin people are now resident on five reserves: Redstone, Ahaham, Stone, Riske Creek, and Alexandria.

During the period of ethnographic research, the Indian population of the Chilcotin was estimated at 600 persons, the pre-smallpox population was likely closer to 1,500 (Lane 1953, Duff 1964, Hewitt 1964). Ethnographically, the Chilcotin were organized into loosely knit bands with the nuclear family probably being the basic social unit. It is generally agreed that some form of social class recognition did exist and that one's social standing could be changed through such social institutions as potlatching. Social classes probably included ranks of noble, common, low and slave. Slaves could be either purchased or were captured during warring ventures.

Socio-economically, the Chilcotin are typed as semi-nomadic hunters and gatherers. Their subsistence pattern was characterized by exploitation of a variety of seasonally available foods, with the principal food supplies being fish, ungulates (deer, goat, sheep), roots and berries. The seasonal movements of Chilcotin people reflected the availability of regional food resources. Total population and the size of seasonal amalgamations were directly limited by food availability at any single time. Harvesting berries might involve the collaboration of a single extended family, while salmon fishing at the outlet of Chilko Lake in late August might support a large group of extend families which tenuously could be referred to as a 'Band'. The socio-economic adaptability of the Chilcotin was such that if a primary food

resource did not become available, a corporate group would be able to split into smaller social units which could then seek out their own subsistence from sources known by that group. It is probable that seasonal movements never followed rigid seasonal patterns but did correspond to a consistent territory.

Winter was commonly a time of dwelling in semi-permanent camps. As Lane (1953) points out, the winter house was a rectangular gabled structure with the archaeologically more visible pit house being a more recent development. Winter sites were usually associated with lakeshore situations, where fishing incorporated the use of nets and hooks. Camping in proximity to major waterways undoubtedly facilitated travel (along lakes) and the hunting of game. These camp occupants would disperse into small, nuclear family units that would hunt until mid-spring (Lane 1953). Late spring would see groups gather again near lakes to fish for spawning suckers and trout, dolly vardon and salmon (Lane 1953). At this time the habitation structures would be mat or bush huts.

Summer provided the greatest range of resources availability. The wild potato was harvested in the Tatlayoko area from June to July, berries and salmon could be harvested in August through September with the hunting of deer and goat being continually abundant although varying in altitudinal range.

Undoubtedly the salmon run at Chilko Lake provided a primary food resource for the Chilcotin people. Salmon fishing camps probably provided the greatest concentration of Chilcotin people and it is likely that the exploitation of this resource defined Band structures that were institutionalized by the

Europeans. It is important to note, as aptly pointed out by Matson (1980) and Lane (1953), that the Chilcotin never developed a village structure centred around this salmon resource. They maintained the smaller extended family or loose band organization.

There are very few ethnographic data sources available for the Chilcotin region and none for the Homathko Development area. Primary ethnographic sources include: Father Morice of the Order of Mary Immaculate (1893), whose work centres on the Carrier people and then secondly on the Chilcotin; Farrand (1900) who recorded 15 Chilcotin myths at the turn of the century; and Lane, who conducted his work well into the historic period (1953). The more recent work of Tyhurst may possibly become important as it concerns itself with an economic perspective of Chilcotin life (Tyhurst, pers. comm.).

It is probable that the study area experienced limited use with the exception of providing travel along the Homathko and Mosley Rivers and in the immediate vicinity of Tatlayoko Lake. The area of Tatlayoko Lake was not used or occupied by any particular Band of Chilcotin people. It probably represents an area which was occupied by a few households of Stone, Redstone or Nemaiah Chilcotin people.

Within the study area the most significant food resources were the abundant deer and a species of "wild potato" (Claytonia lanceolata). This potato was harvested in late June and early July. Old time residents of the Tatlayoko area recall that in the 40's at least 100 Indian people could be found camping on the alpine meadows of the Potato Range (Haines, pers. comm.). These people would have come from the Redstone, Anahim and Nemaiah areas.

The north end of Tatlayoko Lake has now been cleared of the coniferous forest. Prior to settlement the area had a reputation of providing bountiful deer hunting. Such hunting probably occurred in winter, when the deer were down from the mountain side hills and were grazing along the sides of the lake. Fishing resources within the Homathko drainage seem to have been of minor significance. The local people state that in the early part of this century the Tatlayoko Lake offered extremely poor fishing. Fishing began to improve only when they themselves began to stock feeder streams and the lakes with trout caught and transported from the Chilcotin River drainage. Before this time it was said that whenever people wanted to go fishing, they would always go over to the lakes just northeast or to Chilko Lake.

Based on the interpretation of limited available ethnographic information, the expected site types to be found in the area include hunting camps, fish camps (located at the ends of lakes), some storage facilities, and large circular house-pit depressions. As the area does not seem to have been densely occupied in ethnograhic time or historic times, site density is expected to be low.

3.2.2 Homalco Coast Salish (ethnographic)

The traditional Homalco territory borders the project area at its southwest corner (Figure 2). This coastal group, which represents an ethnic subdivision of Comox Coast Salish, occupied the Homathko River valley below Waddington's Canyon, the outlets of the Homathko and Southgate Rivers. Some settlements have been recorded on the islands in the vicinity of the mouth of Bute Inlet (Barnett 1955).

The Homalco people were never a major force in the ethnic mosaic of the central coast. In ethnographic times their population appears to have been small and they were continually being harassed by both the Kwakiutl coming down from the north and the Chilcotin from the east. With this contact/conflict situation the Homalco developed a policy of avoidance rather than conflict. As such, by the 1860's the Kwakiutl had all but taken over most of Bute Inlet, with the Chilcotin often fishing below Waddington's Canyon. Reflecting this policy of avoidance the Homalco moved southward amalgamating with the Klahus and Slaiaman Coast Salish people (Lane 1953).

Interaction between the Chilcotin and Homalco was directly related to the availability of salmon. Pending the size of the Chilco River runs and their harvest process, Chilcotin would often come down the Homathko and fish its lower reaches. The Chilcotin coming down the Homathko, supplemented by their reputation of being warriors, forced the Homalco to abandon their fishing camps near Waddington's Canyon early each August and September (Lane 1953). As slaves were taken in battle, some excnange of information and ideas must have occurred. However, a significant amount of exchange or trade never was developed between these two groups. Aside from some trinkets of trade (bracelets, etc.) the Chilcotin do not appear to have possessed cultural elements derived specifically from the Homalco people (Lane 1953).

As there exists such a poor ethnographic data base for the Homalco people, it is difficult to determine what site types representative of their socio-economic systems would occur in the Homathko River Valley. In all probability, Homalco people continually travelled between the end of Bute Inlet and

Waddington Canyon locale. In this region there exist several opportunities for the harvest of seasonal foods such as salmon, berries, root bulbs, as well as access to range for deer and goat. In addition, black bear and grizzly are in occurrence and were probably hunted. At this time, it is not known if there exists any one resource which would regularly draw the Homalco people.

An additional factor which may have drawn the Homalco people to the study area would have been trade. Trade with the Chilcotin people likely occurred in the vicinity of the Waddington Canyon. In the opinion of Lane (1953), however, the Chilcotin people were usually treated with a policy of avoidance, with a minimum degree of trade only developed in the late ethnohistoric period.

3.2.3 The Waddington Explorations

> "Started early in the morning, each of us heavily loaded, tried again back and forward to find the trail, which if such exists, leading over the frightful mountains which we did see before us, at last we reached the top of one of the same, and behold; so far as the eye could reach, nothing else as Peak, after Peak, thousands of feet in height and clad in perpetual snow was to be seen, below us a dark gap, in perpindicular walls of granite; the Homathco River."
>
> [Waddington's Canyon, From the Journal of Herman Otto Tiedemann (Surveyor for Alfred Waddington on the Wagon Road Project). May 30, 1862.]

While the Bute Inlet and Homathko River area had an extended prehistory of Indian inhabitation and land utilization, white settlers did not appear until the 1860's. Documented direct Euro-Canadian contact begins with the appearance of surveyers for Alfred Waddington and the men he employed to accomplish the

task of opening up a wagon road from Bute Inlet to the Cariboo goldfield which would have been a shorter route than the two existing paths, the Douglas-Lillooet route and the Yale-Lytton route.

During the government of James Douglas a sense of rivalry between the proposed road routes existed. The policy of issuing charters made it possible for the government to fulfill the need for roads into the northern mines without taxation. A road company was allowed to extract tolls from the miners, thus making road building a profitable venture (Akrigg 1977). The two interior roads were long routes involving difficult land travel and an attempt to find an easier less expensive route continued. Investigation into possible routes from the north coast inlets was initiated as early as 1859. However, those who ventured into the inlets came to the general consensus that even though a coast route would better serve Vancouver Island, securing Victoria's position as the dominant port of call for ocean-going vessels, the rugged terrain made a coastal route impractical.

Reports of possible serious physical obstacles barring the way do not seem to have troubled Alfred Waddington. From the moment the idea of a coastal route was conceived in his mind, this inveterate optimist seems to have been convinced of its feasibility (Hewitt 1964). By examining maps of British Columbia and observing the rugged coastline and the dozens of fiords, Waddington observed two inlets: Burke Channel (at present-day Bella Coola) and Bute Inlet, which appeared to be viable routes. Both could provide access to the Cariboo gold fields if a road or trail could be built through them and both inlets did not terminate so abruptly as to make passage into

the connecting river valleys impossible (Rothenburger 1978:15). However, the Bute Inlet route had the advantage of fast water access from Victoria, as Burke Channel is more than twice the distance (400 km) than Bute Inlet is from Victoria.

Although a controversial topic during these times, after negotiating with Governor Douglas, Waddington was granted a charter to construct a bridle path with the right to collect tolls. A few weeks later agreement was reached for its conversion to a wagon road (Spittle 1978). Survey of the trail began in May of 1862 when H.O. Tiedemann "...started in a canoe from Victoria with four men and three Indians from Bute Inlet for the sole purpose of surveying a trail to Alexandria..." (Tiedemann 1862). The trail would require cutting through evergreen forest, traversing innumerable streams and blasting through sheer canyons for a distance of 128 km up the valley of the Homathko River, finally emerging onto the plateau. Some 64 km further north the route would join up with the old trail running east to Alexandria. In total, the new route would cover 254 km by land and 133 km by lakes and rivers, plus 357 km by sea between Victoria and Bute Inlet (Rothenburger 1978).

Before a decision as to the feasibility of the road had been determined, the road construction crew, under the guidance of Waddington, began its work. This first year saw the completion of 53 km of road. Sixty-six bridges were required, including one 28 and another 17 metres long, both in single spans, on the first stretch alone.

In August of 1862, Waddington reported in the Press that in one month's time men would be able to travel from Alexandria by Bute Inlet in a week, and that all the Fraser River pack trains

would then go that way (Hewitt 1964). Waddington avidly explained the advantages of the Bute Inlet route, announcing the formation of the Bute Inlet Wagon Road Company and invited subscribers to its shares. The road progressed during the summer of 1862 as a still-viable route until the crew encountered its first major obstacle in the form of a 2 km long canyon with precipitous walls out of which any road would have to be blasted. To his shareholders he regretfully announced that the difficulties of penetrating the Coast Mountains were greater than he had anticipated, and that the Homathko River was less suitable for navigation than he had expected. He reported, moreover, that the Indians were proving a nuisance. (Akrigg 1978).

Besides the inherent difficulties of surmounting the Coastal Mountains, Waddington's project involved a penetration into territory that previously had been undisturbed by white explorers. Smallpox and influenza epidemics by the 1860's had decimated many of the Indian tribes and rearranged their territorial boundaries. Euro-Canadian trade goods were sought and starvation had become a way of life (Duff 1964). Many Indians knew of Waddington's attempts and came to the inlet out of curiosity and expectation of being employed as packers. However, the expedition had intended upon using mules for packing and after various discussions convinced the Indians that they were not to be employed. They began gathering up their belongings and tearing down their lodges to move out of the way. At one point Waddington sailed with supplies and crew into the Inlet to encounter some 250 Euclataw, Homathko, Chilcotin, and Klayoosh Indians encamped on the very site he had chosen for the townsite that would be named after him (Rothenburger 1978).

The unexpected rough terrain of the Coast Range, bad relations with the Chilcotin Indians who were eventually employed as packers, and a shortage of money were just a few of the factors that led to the eventual demise of Waddington's Trail. Mixed statements were being made by the men who had surveyed the area doubting the trail's potential. These statements were in complete opposition to Waddington's perpetual optimism regarding the likelihood of the trail's potential use. As well, heavy July rains brought the project to a halt for that year, 1862, with Waddington requesting and being granted a 12-month extension on the original one-year term of his charter.

A construction crew returned to Bute Inlet the following year, 1863, to find that the winter snows and spring run-offs had washed away many of their efforts. The crew worked to reconstruct the 10 washed out bridges and once again attempted to build a road through the canyon (Spittle 1978). Waddington decided to take the trail over a hill to avoid the canyon walls. In a letter dated July 8, and printed in the Colonist, he confessed to having experienced difficulties but still managed to sound an optimistic note, as indeed he had to if his company was to continue to receive financial support (Hewitt 1964). By the end of the season the road was still a long way from its completion and the Bute Inlet Wagon Road Company was bankrupt. Waddington began financing the project through the sale of his own properties in Victoria (Spittle 1978).

Bad sentiments with the Chilcotin Indians persisted, until on April 30th 1864 a party of Chilcotin Indians led by a war chief, Klattasine, attacked and killed all but three of the twenty employees working along the Homathko River. This event put a stop to further construction. The Bute Inlet Road was

investigated by officials in Victoria and the truth of the impassable canyon and the infeasibility of the road became known. The slaughter which fell with such apparent suddenness on Waddington's road party was a prelude to a period of increasing tension and misunderstanding between the Chilcotins and Europeans (Hewitt 1964).

3.2.4 Railroad Survey

> "all commence work at camp and having good ground to go over on fast, but as usual, if there was a bit of bad ground, swamp or rock, anywhere within reach, Tiedemann would find it, and he found two or three patches of poplars and a small swamp very close to the lake end and of course took the line thro' them and so at knocking off time we had only done 6 3/4 miles. We can still look back to the snow covered mountains from whence we have come and no one can tell the relief which we feel at the thought of not having to return thro them. Oh ye Alpine Clubmen you should have had the last 3 months with us."
>
> [Tatla Lake, From the journals of George Hargreaves (surveyor for Tiedemann on the C.P.R. survey). October 5, 1872.]

Although much attention was given the Chilcotin massacre of 1864, the search for an overland route from one of the northern inlets through to the pleateau continued. By this time the Great Cariboo Wagon Road neared completion and people began to turn to an even greater project, that of building a British transcontinental railway linking the colonies on the Pacific coast with eastern Canada. (Akrigg 1977). Waddington, still attempting to utilize Bute Inlet as a transportation corridor, rewrote his pamphlet entitled Overland Route through British North America which, once again, emphasized the superiority of Bute Inlet to the Yellowhead, Bentich Arm and other proposed northern routes in terms of agricultural land, frost free days,

etc. (Waddington 1863). His appearance in London to address the Royal Geographic Society gained the interest of a number of influential members who raised the matter in the House of Commons which subsequently appointed a Commission of Enquiry (Spittle 1978).

Waddington died in 1872, never to see his dreams accomplished, however, the Bute Inlet scheme wasn't entirely abandoned. Sanford Fleming, Engineer-in-Chief for the Canadian Pacific Railroad, dispatched Marcas Smith and H. O. Tiedemann to resurvey the area for the potentiality of railway use. (Hargreaves 1930, Fleming 1874). These surveys, which ran for two years, entailed numerous life and death exploits by the survey party. It was finally concluded that the terrain would not accommodate a railroad. The route finally chosen followed the Fraser Canyon and the Bute Inlet attempts were abandoned.

3.2.5 Homestead Period

From the early conception stages of Waddington's Trail until the late 1890's, the townsite at Bute Inlet was settled by various homesteaders who preempted and farmed the Bute Inlet area. But, because neither the Waddington Wagon Road nor the C.P.R. succeeded in opening up the territory, settlers at Bute Inlet were not destined to thrive. F. A. Devereux, who was called upon to estimate the feasibility of reopening the 'Old Waddington Trail' estimated that with $13,000. it could be done (Devereux 1896). However, no attempts at reopening the trail were carried through.

Early settlement, pre World War I, within the study area began at the north end of Tatlayoko Lake with various homesteaders

such as Howe, McGee, and Park, who migrated from the Williams Creek region westward to farm and ranch unsettled areas. Settlement was a product of the accessibility of the area by way of the Cariboo Wagon Road, not by people en route from Victoria through the Waddington Canyon.

The land area south of Tatlayoko Lake through to Bute Inlet was never settled, but utilized by trappers such as August Schnaar, who gained legendary proportions in his trapping, guiding, navigation, and survival abilities (Shields, Haines, Bracewell, pers. comm.). Schnaar, who trapped the area for approximately 40 years, had a series of trapline cabins from Bute Inlet to Tatlayoko Lake. The west branch of the Homathko, Mosley Creek, was also used by trappers, but unlike the Homathko trapline, which was used solely by Schnaar and his occasional partner Scribner. Mosley Creek was trapped by a variety of people; Nicholson, Mullen, Braid, Butler and Hamm (Haines, pers. comm.).

Besides the attraction to the area by settlers and trappers, the grandeur of the areas 4,000 m high Mt. Waddington and neighbouring glaciers attracted people seeking out the area for its wilderness recreation potential. On an almost annual basis from 1926 onward, Don and Phyllis Munday with various mountain climbing expeditions, backpacked their way up Mt. Waddington, the summit of which was not conquered until 1936 (Alpine Gazette 1937). Use of the area for recreation potential has been known since these expeditions began and is well documented in Alpine Gazette and the Mundays' book The Unknown Mountain (1948).

Utilization of the mineral resources began in a speculative manner by the early prospectors. Morris Mine (Lot 846) originally owned by Striker Resources, was staked in 1909 and

ran until 1934 (Moore, pers. comm.). Lead minerals were discovered but due to the lack of transportation it was an unprofitable venture. The Finney mine claim (Lot 1678) was staked before the war, although no development occurred after World War I.

3.2.6 Water Rights Investigations

During the late 1920's the B. C. Government's Department of Lands and Forests, Water Rights Branch investigated various rivers in British Columbia for their water power resource potential. One such investigation and subsequent field survey was done in the Taseko-Chilco-Homathko drainages. The initial 1928-1930 project suggested the development of power from the waters of Chilco Lake and its tributaries by 2 main alternatives. One scheme involved the use of water directly from Chilco Lake to streams on the Coast side of the mountains. The second set of alternatives involved diversions via Tatlayoko Lake and the Homathko River (Water Rights Branch 1928-30). Numerous diversion and dam schemes were postulated. However, because of the enormity of the project and because of other more feasible projects in B. C. the Taseko-Chilco-Homathko project was shelved until 1948 when the original 1928 documents were reviewed and rewritten.

A prefeasibility study in the Homathko Area was reinitiated in 1957 and 1958. This survey, employing the use of helicopters, investigated the potential of using the water in Taseko, Chilco and Tatlayoko Lakes. Once again, the feasibility of utilizing these drainages versus other major drainages in B. C. was questioned. The field maps and report were shelved until the 70's when the area was reevaluated for its hydroelectric potential.

4. METHODOLOGY

4.1 Background Research

Prior to the initiation of preliminary inventory assessment field studies, a number of literature sources were reviewed and persons familiar with the study area were consulted. A file search was conducted at the Heritage Conservation Branch in Victoria, where the B. C. Archaeological Site Inventory Forms are housed. From the files of the Heritage Conservation Branch one site (EjSc-1) was recorded in the study area. This site consists of 4 circular depressions and was recorded by Mitchell in 1964.

The field notes and maps of the original surveys conducted in the area were also reviewed. The journals of Tiedemann (1862) and Hargreaves (1930) were consulted. The photographic records from 1875 and 1920 were reviewed. The records of Provincial land purchases, mining claims and homestead purchases, mostly from the period 1906-1920 were analyzed. Other references to land use appear to be limited.

In developing the field strategy, manuscripts pertinent to gaining an insight and understanding of the regional heritage resources were studied. Within an archaeological context the work of Mitchell (1970a, 1970b), Wilmeth (1977, 1978), and Matson (1980) were reviewed. This research reflects work completed in the Chilcotin ethnic territory but unfortunately none of the work had been undertaken within the the Homathko Development study area. The above mentioned work provided valuable information pertaining to the identification of site type, cultural history, contemporary research problems, and environmental consideration for determining site location.

In an ethnographic perspective, the work of Lane (1953), Farrand (1980), Barnett (1955), and the more recent socio-economic work of Tyhurst (1982, pers. comm.) were studied. The nature of the ethnographic documentation does not greatly benefit archaeological site survey strategies. The above referenced ethnographic works are of a general nature or discuss non-pertinent super organic subject matter for formulation of settlement/subsistence analogies for the Homathko Development study. However, the data did provide the consultant with a basic understanding of the nature of aboriginal life in the Chilcotin and its probable relationship to expected remains to be found within the study area.

In developing the field strategy of the preliminary inventory assessment feasibility program, consultation was made with B. C. Hydro heritage personnel. Consultation with B. C. Hydro complemented by the consultant's knowledge of the area was sufficient to design a survey strategy. The program proved adequate in its stated goals of achieving representative geographic coverage and gathering an understanding of the regional heritage resources. Now that this stage has been completed, contact has been established with the University of British Columbia, which has undertaken heritage research in the area, to correlate findings and discuss the development of a more sophisticated survey strategy. These survey strategies would possess both the ability to generate quantitative results and contribute to the ongoing study of Chilcotin lifeways and early history activity.

Aerial photographs and 1:50,000 National Topographic Survey map interpretation were fundamental in designing the field

strategy. Terrain analysis was a key factor. In the analysis, areas were delineated into high, medium and low potential for the location of heritage sites and survey logistics were calculated.

4.2 Survey Design

4.2.1 Historic resources

Within the defined study area there exist two distinct types of historic resources; Waddington's Wagon Road and remnants of the early homestead/trapping economy and exploration activity. The Waddington Wagon Road represents the 1862-64 attempt to build an access road from Bute Inlet to the Cariboo Gold Fields. Within the impact area, it is in evidence from the west end of Waddington's Canyon to the locale commonly referred to as Murderer's Bar.

The primary purpose of the completed inventory and assessment of Waddington's Wagon Road was to locate and flag its location in the field using both 1:50,000 and 1:25,000 map series such that B. C. Hydro, during its exploratory/feasibility program, could avoid conflict with the resource. To assist with the location of the wagon road the survey team contacted John Spittle, who in 1978 spent 6 weeks mapping the route. His work proved of great assistance and enabled the survey team to complete a significant amount of work within a reduced period of time. The field survey team was assisted by 1:20,000 aerial photograph coverage, B. C. Hydro's 1:10,000 map series, and Spittle's 1:20,000 map and his field notes.

The survey strategy for evaluating the remnants of the early 20th century trapping economy and mineral/water right exploration was primarily based on the study of historic documents and the survey of locales traditionally associated with their activity. Legal surveys, early maps, historic site files and the files of the Heritage Conservation Branch were reviewed. In addition, stream and river confluences were surveyed as they have traditionally been a place for trappers to locate a line cabin. Such locales were selected for cabin building as they were situated at meeting places between tangent valley systems and, therefore, different trap lines. Trap-line cabins were usually situated between 10 and 15 km apart. Yet in this study several cabins of differing vintage were found in close proximity to one other. Local informants also proved valuable in locating historic sites and/or providing background information on them. As most of the Homathko Development study area occupies a relatively inaccessible region, it was difficult to find any local persons familiar with parts of the study area other than its peripheral zones.

4.2.2 Prehistoric Resources

(i) Initial Design

The initial design of the sampling program was carried out with reference to the overview of heritage resources and potential impact report prepared by Simonsen for B. C. Hydro (B. C. Hydro 1982(b)). This overview identified the heritage potential of various parts of the Homathko Development study area. The work program included in the contract proposal was referenced to this discussion of heritage potential.

With the exception of Mosley Creek, the overview assessment and the actual field conditions were closely matched. In this instance the initial ranking as moderate was definitely too high and the area was reassessed as low. Very little material cultural evidence emerged during the survey of Mosley Creek valley. Field conditions were difficult and the actively meandering river, constrained in several locations by very active outwash fans from tributary streams, suggest few sites would have survived. The survey program was modified in the field to reflect these realities.

The following sections describe the actual field survey techniques as opposed to those proposed on the basis of the overview study.

4.2.2 Prehistoric Resources

(ii) Tatlayoko Lake Survey (Figure 3)

The survey of the Tatlayoko Lake pondage area employed both a probabilistic sample strategy and judgemental survey (Butzer 1973). Location of survey areas were determined by the review of aerial photographs and N.T.S. 1:50,000 topographic maps. In summary, the judgemental survey documented 13 sites while the sample strategy documented 5 sites (Table 1).

The sample strategy employed for the study of the Tatlayoko lakeshore was a stratified random design. The shoreline was segmented into 400 m segments and sampled randomly. Selected quadrats were surveyed on a regular grid 200 m deep. The lakeshore survey entailed the study of 24 quadrats, representing 20% of the Tatlayoko Lakeshore.

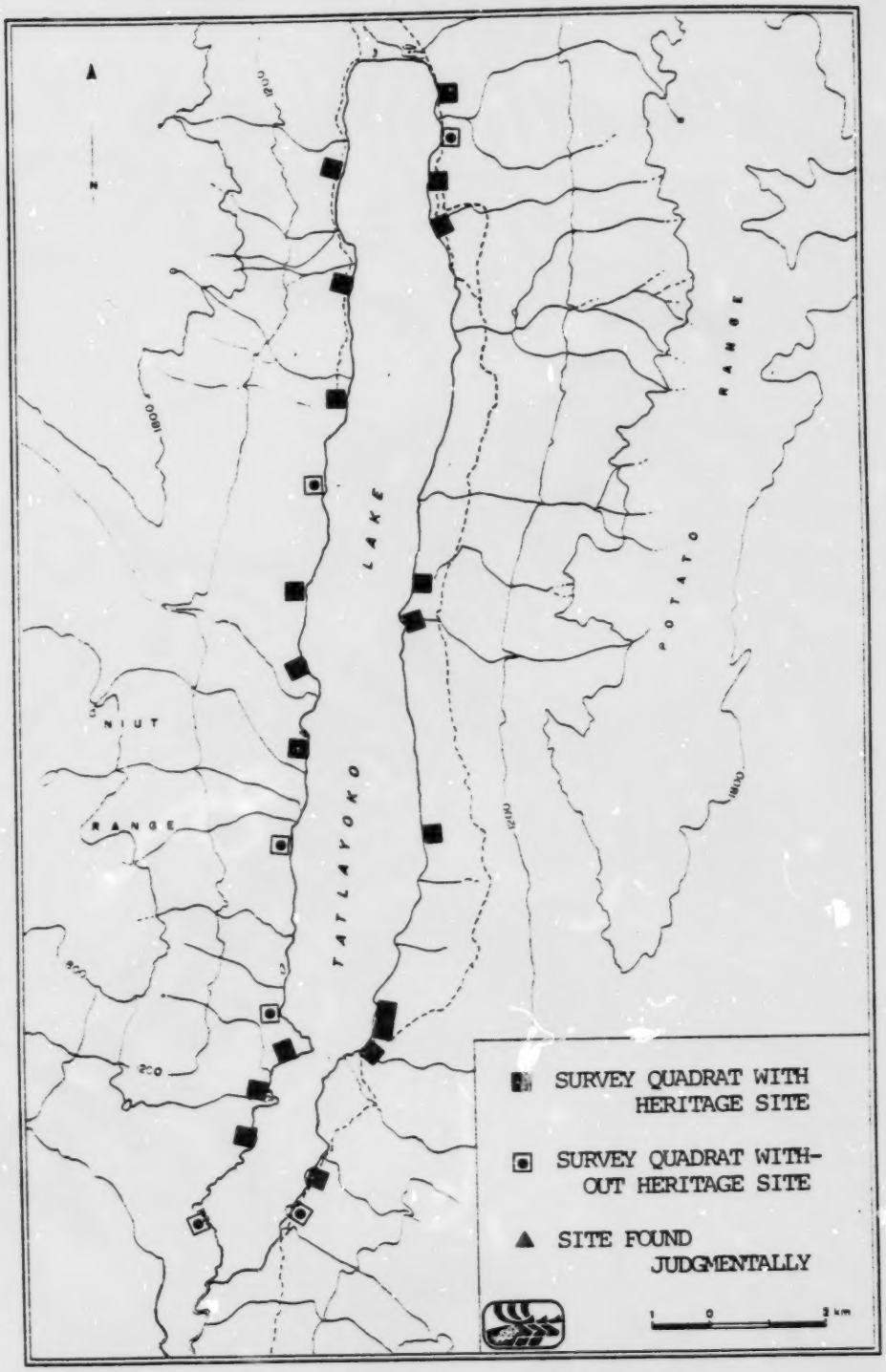


Figure 3; Tatlayoko Lake sample survey.

The quadrats were 400 m in length (along the lakeshore) and 200 m in width (perpendicular to the lakeshore). Within each quadrat 4 transects were identified, spaced 100 m apart. Along each of these transects 1 m x 1 m exploratory test pits were excavated at 50 m intervals. In total, 16 exploratory test pits were excavated per quadrat. All material was screened using 1/4 inch mesh. The first test pit, situated on stable shoreline, was generally placed 10 m in from the active shoreline. The remaining 3 units were placed 50 m apart in a compass bearing perpendicular to the lakeshore.

The quadrat size was chosen using two criteria: efficiency and compatibility. The first refers to the need to gain an understanding of the regional heritage resources within budgetary and temporal limits. It was not the intent of the survey technique to provide site density statistics. Such figures would be relatively meaningless averages in such heterogenous terrain. Rather, it was important to objectively sample to determine the locations of high site potential while at the same time employ a survey sample which could be used in the future to generate valid statistics. The survey as designed provides the basis for between quadrat and within quadrat analysis of variance, within the stratified units along Tatlayoko Lake. Of course, the sample size will need to be increased if such studies are deemed to be significant at some future point. The second criteria used was compatibility with other archeological surveys in the area.

The actual quadrat size (400 m x 200 m) was determined in review of Matson's Eagle Lake Study (1980). For determining quadrat size in this study, which employed 400 m x 400 m quadrats, Matson reviewed logistic, sampling, site density

considerations, as well as reference to contemporary studies to determine effective quadrat size (Matson 1980). Briefly, within the central interior, quadrat sizes have ranged from 300-500 m. This is small enough so as to provide adequate quadrat number per study area, although this is dependent on study area size. If a small quadrat is defined, more time is spent transporting the crew and finding the quadrat. However, a 400 m square quadrat provides a size which can be identified easily by 1:50,000 N.T.S. interpretation. Accurately locating a smaller quadrat would have required more time and would have introduced a greater error factor.

For the feasibility study level of this year's work at Tatlayoko Lake, the quadrat size was manageable and efficient. The quadrat could be located by studying the lakeshore and interpreting a 1:50,000 N.T.S. map. The survey crew of 4 generally located and surveyed 3 quadrats per day.

In addition to the exploratory test pit program, each quadrat was surveyed by walking the area in a zig-zag fashion and randomly excavating test pits as well as checking natural or man-made exposures.

4.2.2 Prehistoric Resources

(iii) Tatlayoko Lake Survey (Inlet/Outlet) (Figure 4)

Traditionally, lake inlets and outlets have provided a focal point for resources exploited by aboriginal people. The activity at such sites include fishing, hunting, trading, or places for social gatherings. In response to this relative importance, both ends of the lake were stratified out of the

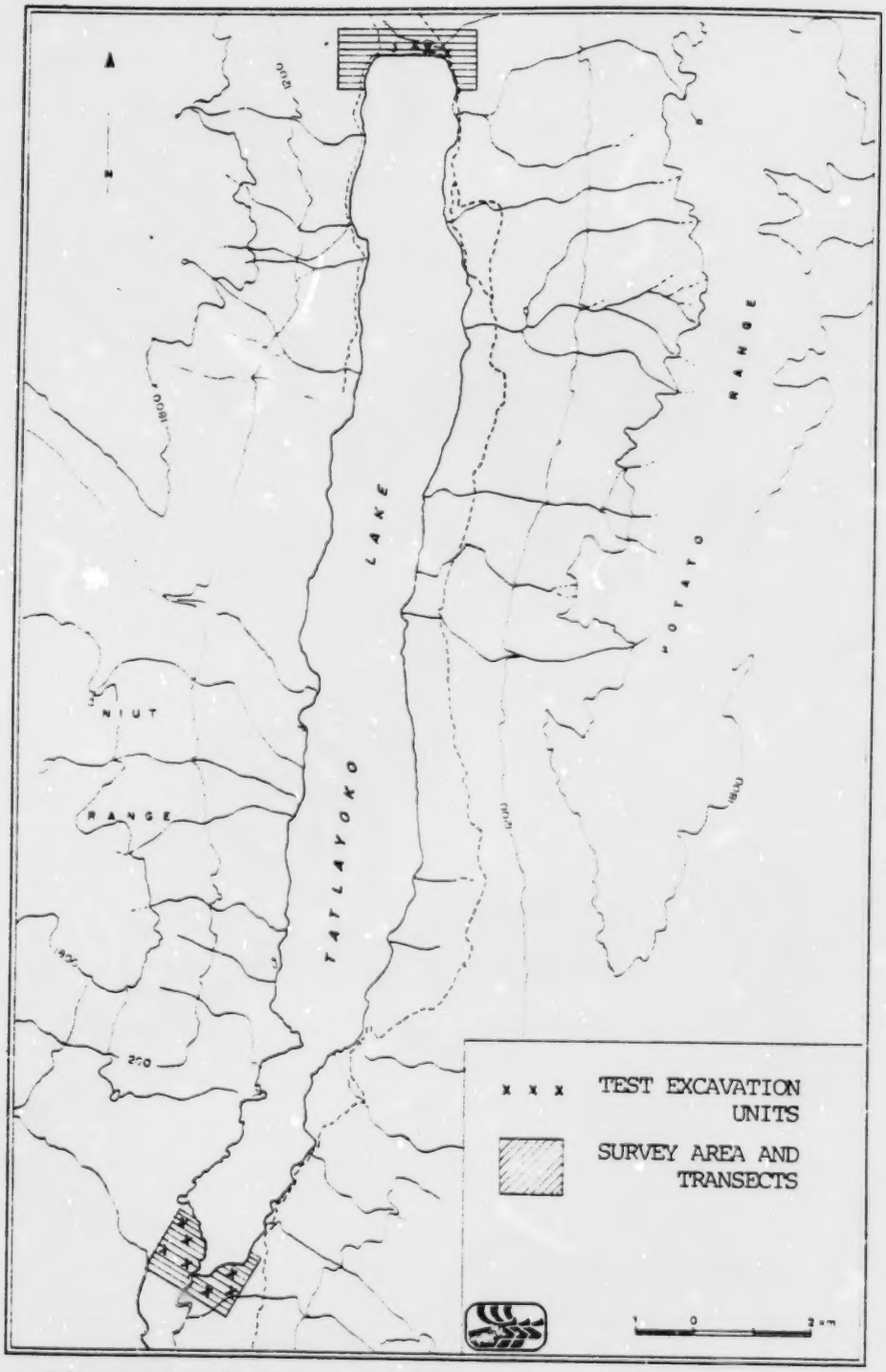


Figure 4; Tatlayoko Lake survey (inlet/outlet).

sampling strategy and surveyed separately. This was done to ensure intensive coverage of these locales. The survey strategy for both the outlet stream and inlet stream entailed 2 persons walking transects which were spaced 100 m apart. Along each of these transects exploratory test pits were excavated every 50 m. These pits were excavated until culturally sterile soil was reached, this being approximately 30 cm. In addition to the survey conducted along the transects, the area was walked and judgementally surveyed. Exposures, whether natural or man-made were checked.

The locations of these transects were judgementally selected and coverage was limited to areas adjacent to the river, although the lowland areas are very large with moderate to high potential. At the southern end of Tatlayoko Lake 140 test pits were sampled. At the northern end the program was more judgemental due to property access restricted by private landowners. Several natural exposures were checked in addition to 20 test pits.

4.2.2 Prehistoric Resources

(iv) Judgemental Survey of the Homathko River and Mosley Creek

A judgementally based survey strategy was implemented for the evaluation of heritage potential for the remainder of the Homathko Development study area. As defined, a judgemental survey isolated specific geographic locales which were based on environmental criteria, ethnographic analogy, and reference to site/data information correlated from previous heritage studies to possess a potential for site occurrence. Table 1 presents a

summary of site types and environmental locale correlation. This information is derived from Wilmeth (1978), Blacklaws (1980), Matson (1980), and Tyhurst (1982). Of the above listed environmental criteria the availability of water seems to have been the most significant element which limited site location (Matson 1980). In Matson's study of the Choelquoit Lake Region, most sites were located within 1,000 m of water while most, if not all, sites of any size were located within 100 m of water (Matson 1980). When viewing the relevance of Matson's work to the Homathko Development it must be kept in mind that his work was conducted in an area characterized by anadromous fish, specifically, the Chilko Lake Sockeye run which represents 30% of the Fraser River escapement.

The judgemental survey teams were conscious of three primary site types which possess some probability of occurring in an identifiable environment. Habitation sites are the largest and probably most significant of the prehistoric sites (see Section 6.2 for discussion of site significance). These campsites varied in size and form from large circular depressions to small overnight camps occupied by one or more families. Circular depressions are usually found in association with river/lake confluences or terraces which offer good drainage and/or viewpoints. Most habitation sites were found to have southern exposures, usually associated with some food resource whether it be fish, ungulate range or plant resource. It must be kept in mind that small campsites are probably distributed throughout the study area. These sites represent sites used while groups or families were in transit from area to area between valley systems and food resource.

TABLE 1 Preliminary Site Characteristics List

Site Type	Environmental Locale
Circular depression (house)	- within 100 m of water - most within 100 m - usually associated with River but also lake inlet/outlets - southern exposure - low level, good drainage - proximity to grasslands
Circular depression (cache pit)	- lake inlets/outlets - terraces overlooking lake
Campsites	- lake inlets/outlets - stream confluences
Lithic scatters (open elevated locales nearer to lakes than rivers)	- ridge tops, promontories - viewpoints - grasslands

Roasting pits	- location strongly inferred from ethnographic literature. This site type does not correlate with any one particular locale. Within the Homathko Development study area one could expect to find them near lake inlet/outlets, alpine meadows in association with 'wild potato' crop
Hunting camps and traps	- low elevations associated with ungulate habitat and migration routes

* Proximity to water is the most determining environmental factor with regard to predicting site location and density.

(after Blacklaws [1980] and Matson [1980])

Lithic scatters represent the second site type expected to be found in the Homathko Development study area. These sites manifest as stone artifacts, broken or discarded tools, flake debitage, or utilized flakes. They can be, but usually are not, in association with cultural features such as circular depressions. Lithic scatters functionally represent a range of activities. These sites represent activity areas of stone tool manufacture, possibly a kill and butcher site or a limited occupation site where all organic (bone, wool, leather) material culture has subsequently decomposed. Lithic scatters can be associated with a range of environmental and physiographic features inclusive of river/stream confluences, ridge tops, promontories, and viewpoints which overlook ungulate range.

Stone features or structures are also to be expected in the study area. Petroform features represent camp/storage areas (rock rings, stone pits), ceremonial acts (rocks placed in a row to signify number of dead), or land markers (cairns). Cairns could be associated with open ridges, hilltops, and/or other high points whereas stone cache pits would be found in close proximity to a food resource with a ground matrix characterized by good drainage. At this time in our research, it is not possible to connect ceremonial activities with environmental locales aside from an, as yet, untested assumption that they may occur in association with large camp situations, promontories or along major trails.

Judgemental ranking of the region was initially completed, as part of the B. C. Hydro Heritage Overview Study (B. C. Hydro 1982). The preliminary inventory assessment field study of the Homathko Development conducted during the summer of 1982

confirmed, for the most part, the rank designation for most of the regions. The value of the 1982 field project was in the identification and field evaluation of specific locales of high and medium potential which were situated in the large land areas designated as possessing low heritage potential. (For a detailed discussion on the locales ranked high, medium and low, refer to Section 5 of this report.)

The judgemental survey of the Homathko Development study area was conducted by a survey crew of 2 persons over a 10 day period. Initially, the survey involved a helicopter reconnaissance of the area. In the course of the reconnaissance the survey crew observed physiographic features, and geographic locales which may have supported an aspect of the early historic life or prehistoric lifeways. These were then marked on the corresponding area photograph and 1:50,000 National Topographic System (N.T.S.) maps. A judgemental shovel and screen testing program was conducted.

4.3 Assessment of the Exploratory Drilling Program

A drilling program for feasibility and exploration studies on the proposed Homathko Development was carried out in 1982. This program included drill sites at each of the four project locations: Tatlayoko Storage Project, Nude Canyon Project, Mosley Creek Project, and Waddington Canyon Project. This exploratory drilling program was conducted to determine foundation conditions at the various dam and powerhouse sites and to locate sources of construction materials.

The 1982 heritage program assessed the impact of the exploratory drilling program on the heritage resources by

visiting each individual site. As stated in Section 6 of this report, potential conflict exists with the drilling exploration being conducted south of Tatlayoko Lake towards Bowl Lake. The Bowl Lake area has been identified as having high heritage potential and new drill sites proposed for the region should be assessed prior to commencement of drilling. The drill site locations identified as of October 1982 for the Mosley Creek, Nude Canyon and Waddington Canyon locales all occupy places of low heritage potential. These drill sites are situated either on the sides of steep 'V'-shaped valleys, walls of canyons, or on small river terraces situated near or in the canyons. For the most part, the drilling program proposed for these three dam projects does not require further field assessment. Further field assessment need only occur if the exploratory drilling program for the Waddington project is conducted below the canyon where, based on ethnographic evidence, a seasonal salmon fishing camp may exist (see Section 5 of this report).

5. HERITAGE INVENTORY

5.1 Evidence of Historic Land Use Activity (Figure 5)

Twenty-nine heritage sites were located and documented while completing the heritage reconnaisance, within the feasibility stage, of the Homathko Development. Of this total, 7 were historic log cabins, two were components of the historic Waddington's Wagon Road while the remaining 20 were of prehistoric origin.

To maintain consistency within this heritage study, World War II is considered the cut-off date for sites affiliated with the historic period. Sites dated after WW II are classified as contemporary. Within the Homathko Development study area the historic sites (aside from Waddington's Wagon Road) consisted of the remains of log structures. Most of the recorded structures were log cabins associated with traplines and were situated adjacent to either the Mosley Creek or Homathko River and in association with the confluence of a secondary stream. Most, if not all of the cabins designated as being a trapline cabin were owned, built and seasonally occupied by August Schnaar, who lived in a houseboat near the mouth of the Homathko River during the 30's, 40's and 50's and held the trapline license for the Bute Inlet/Tatlayoko Lake region, as well as part way up the Mosley Creek. Schnaar ceased to work his trapline during the 1950's and passed away during the spring of 1982.

The single cabin site situated along the Mosley Creek which is not associated with the trapline economy site is EhSf-2. This cabin site is associated with the Hydro water surveys of 1957. Generally speaking, the site can be said to consist of 2 components, sites EhSf-1, EhSf-2.

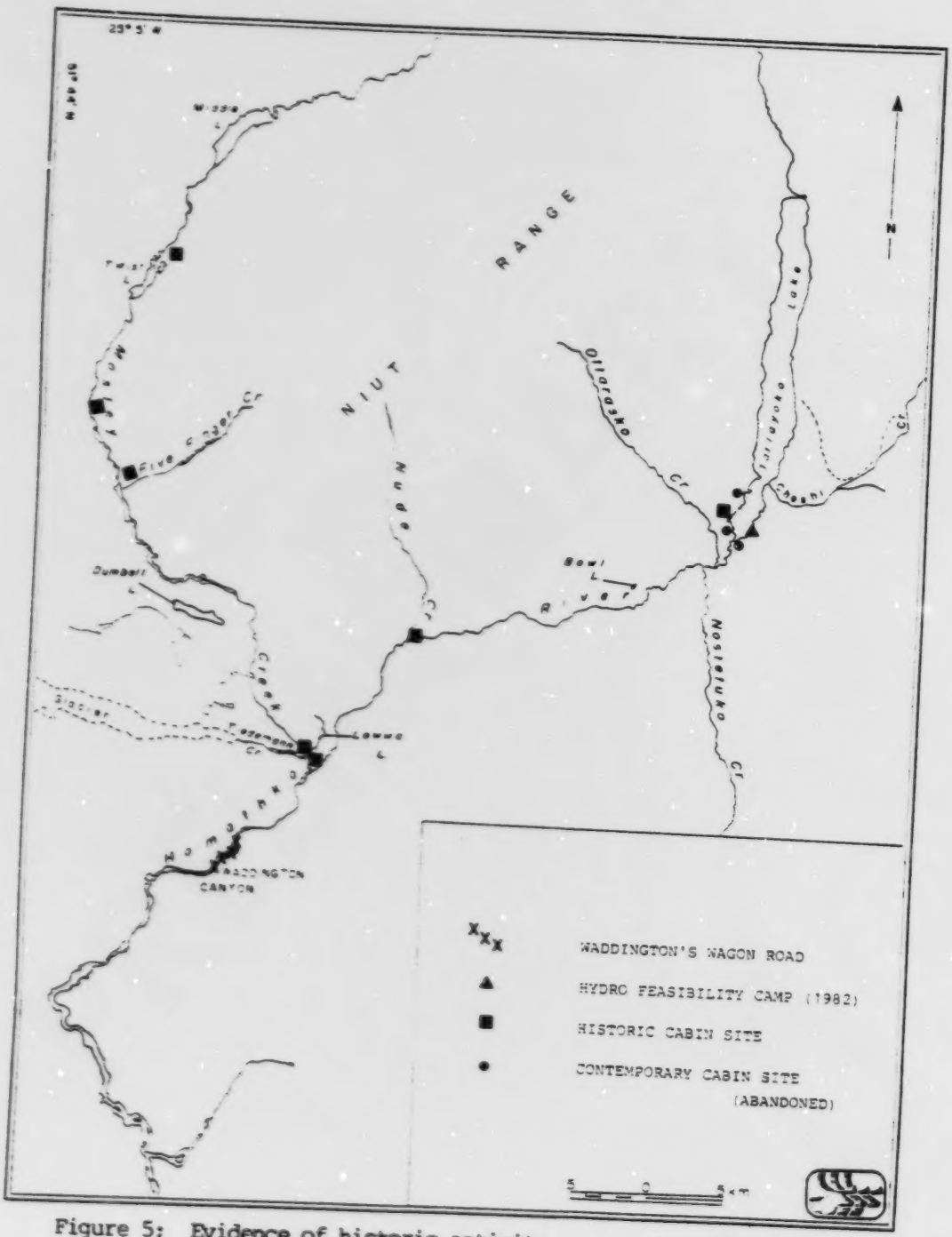


Figure 5; Evidence of historic activity.

Site EhSf-1 seems to have been one of Schnaar's trapline cabins which was also occupied, probably only for one season, by the Hydro authorities who conducted water studies in 1928. On the outside doorsill of this cabin was printed:

G.W. Templeton 26-9-28
S. Doran
June-August 57 B.C.P.C.
MCRAWf

The first line of the inscription is affiliated with the 1928 survey while the second to fourth lines of the inscription are associated with the Hydro survey of 1957, whose base camp operation comprises site EhSf-2, situated 100 m to the south. This site is relatively large, 75 m x 40 m, and as previously mentioned, represents the base of operation for the water surveys of 1957. In association at the site is one large structure destroyed by fire, 2 small storage cabins, as well as a large tent platform.

Two cabins were recorded that are not located on either the Mosely Creek or Homathko River. These are sites EjSf-1 and site HOM 18, located at Twist Lake and Tatlayoko Lake respectively. Cabin site EjSf-1 represents one of the pioneering attempts at homesteading the upper Mosley/Twist Lake area. From local information (Foster, pers. comm.), the cabin was built in 1920 by Charlie Parks as a result of a World War I land grant. The cabin is 5 rounds high (approx. 3 ft. high) and is of double notch construction. This cabin characterizes the trapline architecture in being small and low to the ground. It has the added feature of a trench along the centre of the cabin starting from the door and heading toward the back

wall. In this manner, the walls of the cabin are not built up and prove efficient for heating. The stove sits on one side of the trench on the shelf which is the original ground level, while the bed is on the other shelf. Site EiSc-1 is a complete log cabin situated on the west shore of Tatlayoko Lake across from the Hydro feasibility study camp located at the south end of the lake. This cabin was built in the late 1920's by Finney for access and accommodation while conducting mineral exploration up the Ottarasko Creek. The cabin is in good condition, and is used by residents while driving cattle or by hunters during hunting season.

5.2 The Waddington Wagon Road

5.2.1 Introduction

Approximately six kilometres of the Waddington Wagon Road remain within the study area (Figure 1). The 1982 field survey, building on the substantial work of Spittle (1978), completed the inventory, locating several new sections which had previously been mapped by inference. This inventory is summarized in Figures 6-13.

5.2.2 Physical Evidence

> "[For the canyon I recommend] have a horizontal hole drilled in the rock to receive a Tronbolt with a square frame attached to it, to receive a crosspiece of timber, 9" x 12", 8 ft. long, the outside resting again on a girder, supported by posts, secured between boulders in the water, then the whole to be covered with split timber to enable men and horses to walk on it, these frames may be placed at intervals of 20 feet, the bluffs are seldom very long."
>
> [H. O. Tiedemann to Alfred Waddington, from Fort Alexandria. October 1861.]

The existing physical evidence of the trail consists of:

i) Angular stone and rock work on top of natural bedrock to provide a relatively level road surface without blasting.

ii) Physical evidence of blasting and filling, including approximately 30 drill holes and different sites.

iii) Iron work, consisting of rods used to suspend timber cribbing on steep switchback construction sites.

iv) Timber and cribbing (primarily cedars) used to support rockwork on steep switchbacks. All evidence along the river shoreline has disappeared.

v) Cedar stumps at creek outlets which provided indirect evidence of trail location, in areas where no subsequent land use pattern is evident.

vi) Rock work along the river shoreline using water worn cobbles.

vii) Earth excavations for building purposes along river terraces.

viii) Ideal campsites which have been subsequently used by other surveyors and travellers which one can infer were likely used by the construction crew as they are generally the only ones available.

The distribution of these features is summarized in Figures 6-13.

5.2.2 Physical Evidence

The following descriptions are limited to those sections of the wagon road that were surveyed during the 1982 field season under the terms of reference of the project. Below Waddington Canyon (Figure 1) the wagon road continued approximately 2 kilometres to the ferry crossing (Figure 13) and then to the outlet of the Homathko River at Bute Inlet, along the east side of the river. No survey of this lower section was undertaken, but Spittle (1978) suggests that little physical evidence remains.

(i) From the River to the Rockslide

The initial section of the trail (Figure 6) has been obliterated by logging activity. It is suspected that the most probable route rises on one of several bedrock benches several hundred metres upstream of the first bluff at the outlet of Waddington Canyon. The first physical evidence of the trail is rockwork about 400 m above the valley floor along a small creek in a wet cedar hemlock microsite. There is no physical evidence of the trail from the river to this rockwork but there are cut cedar stumps about one-half the distance up the creek to the site of the first rockwork. There are natural terraces in several locations and the creek appears to have been reasonably active and has likely changed location frequently so it is possible that much evidence has been destroyed.

The trail switchbacks across another small creek through another cedar thicket and emerges onto open granite slabs. Above this is a further indistinct section through cedar stands above which it emerges onto an open rockslide area which has been relatively stable since the construction 120 years ago. The trail makes one large switchback through this slide area. The trail surface is paved with flat rock from the slide itself and it obscured in some areas by debris which has rolled from above.

Figure 6 THE RIVER TO ROCKSLIDE SECTION

5.2.2 Physical Evidence

(ii) High Traverse Section

Above the rockslide the trail begins a long, nearly horizontal traverse of the gentle slabs above the canyon. This section consists entirely of dry stonework making use of natural benches where available. The surface is level and generally 1.5 to 2.0 m wide. The trail loses approximately 30 m elevation in the 750 m traverse and emerges onto the shoulder of the long rounded ridge which forms the upper end of the canyon, 250 m below.

The dry stonework throughout this section is very well preserved and little slippage has occurred. The size of material used varies considerably and inconsistently, implying that the most available materials were used. Little, if any, attempt was made to anchor the stonework if the slope was gentle, a practice which was sufficient on the dry bedrock slopes.

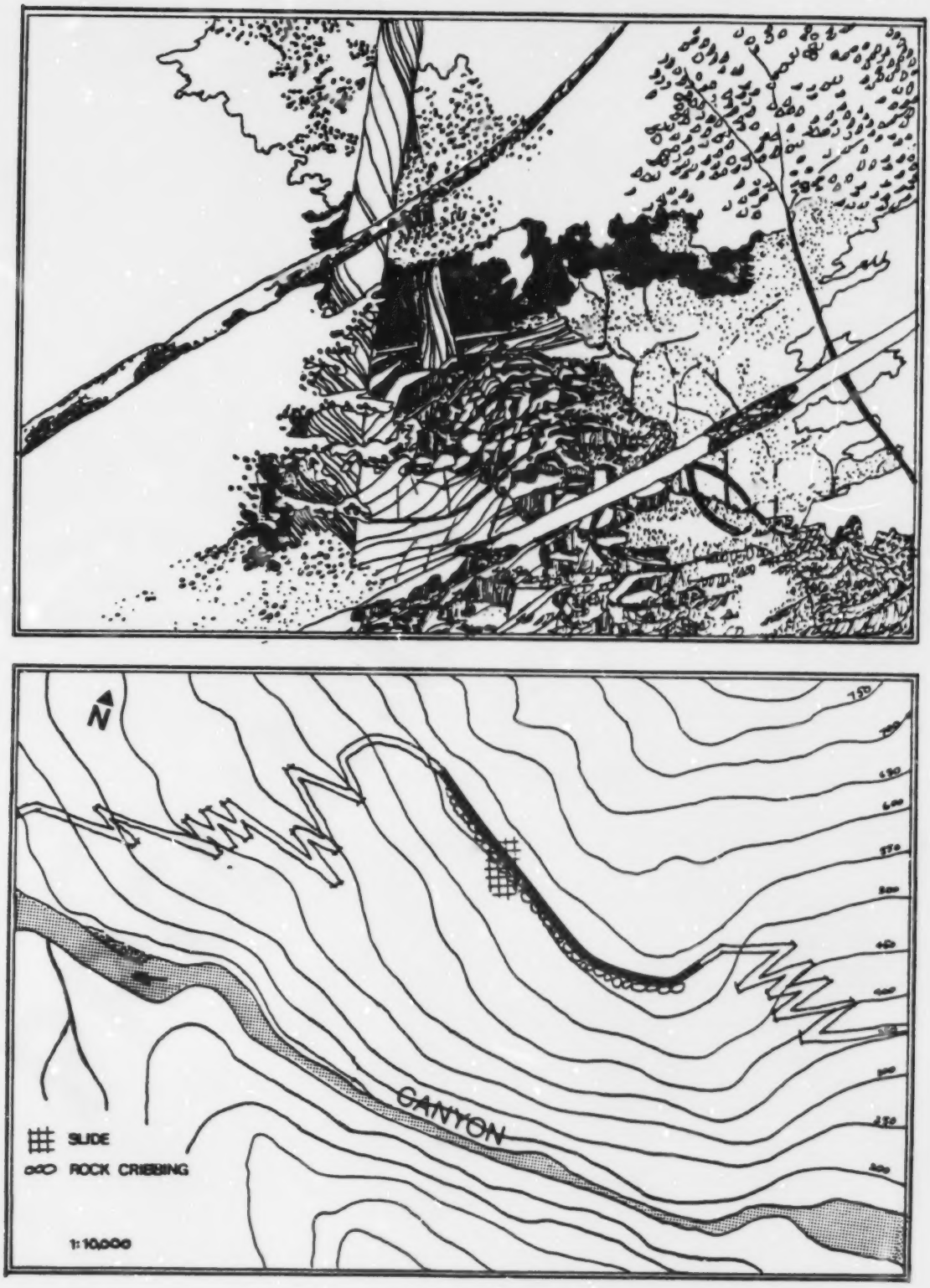


Figure 7 HIGH TRAVERSE SECTION

5.2.2 Physical Evidence

(iii) Upper Descent Section

Leaving the open horizontal traverse one descends immediately into a cedar hemlock gulley and traverses approximately 8 switchbacks of greatly varying length and definition. Below this is a long descending traverse along an eroded joint feature and slabs where the trail consists once again of dry stonework sitting directly on the bedrock. This terminates about 50 m above an open granite slab which marks the top of the overhanging cliff, 80 m above the upper end of Waddington canyon. The trail makes 8 switchbacks, outlined in stone down a very narrow cedar-filled gulley to this slab.

Throughout this section there are numerous examples of felled trees and stumps. The tree boles are rolled against standing trees and backfilled with rock and excavated soil. These features provide very good definition for the switchbacks. At one point in the upper switchback in this section, there is an excellent example of a small 15 cm diameter cedar log used as cribbing in rockwork at the corner of a switchback. This is moss covered but very well preserved. [See Figure 8.]

At the lower end of the long descending traverse is a drill hole containing a loose square bar which appears to have supported a beam which in turn would have supported a rock and earth ramp down off the bedrock into the lower cedar gulley. No blasting occurred here which is inconsistent with decisions made further along the trail when considerable blasting occurred to remove smaller obstacles.

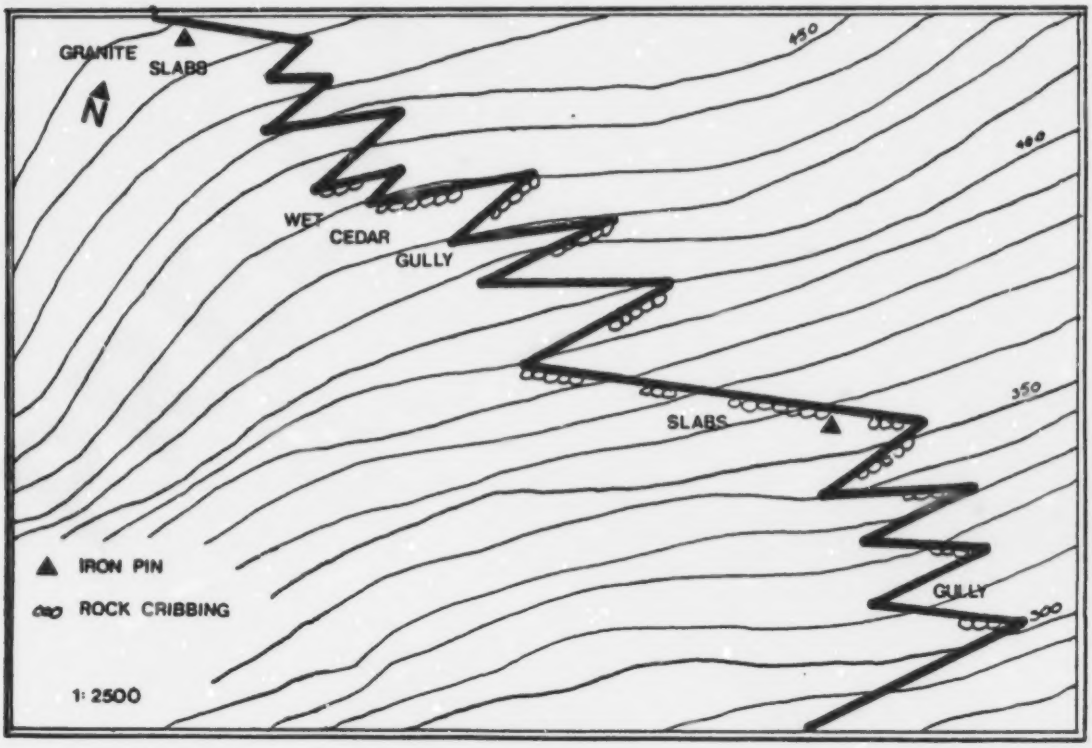


Figure 8 UPPER DESCENT SECTION

5.2.2 Physical Evidence

(iv) Lower Descent Section

Once on the open slabs above the cliff the trail switchbacks downstream again avoiding very steep overhanging bluffs and a steep gulley which foot travellers may scramble down. The trail traverses several horizontal joint defined benches, gradually descending into another cedar hemlock gulley. There are two distinct portions to this gulley and the trail makes two switchbacks across the upper gulley and then drops into the second across a gap which has fallen away but was once comprised of a large volume of blasted rock. Once around this corner there are 8 well-defined but overgrown switchbacks with massive stonework at the corners. These last features were not discovered by the Spittle survey crew and they descend all the way to the river.

At the river there are approximately 20 cut stumps which suggest some substantial timber structure was in place along the riverbank but no evidence remains. No iron work is evident in this section.

The most significant feature in this section is the detailed use of small rock for the dry stonework in the upper slab sections where there are many very short switchbacks used to reduce the overall grade. Four round pins are drilled into the bedrock which presumably supported timbers used to keep the paving stones in place on the steeper slab sections. Once into the cedar hemlock bog section there is a great deal of residual evidence that cedar timbers were used extensively for cribbing although these have collapsed in most locations.

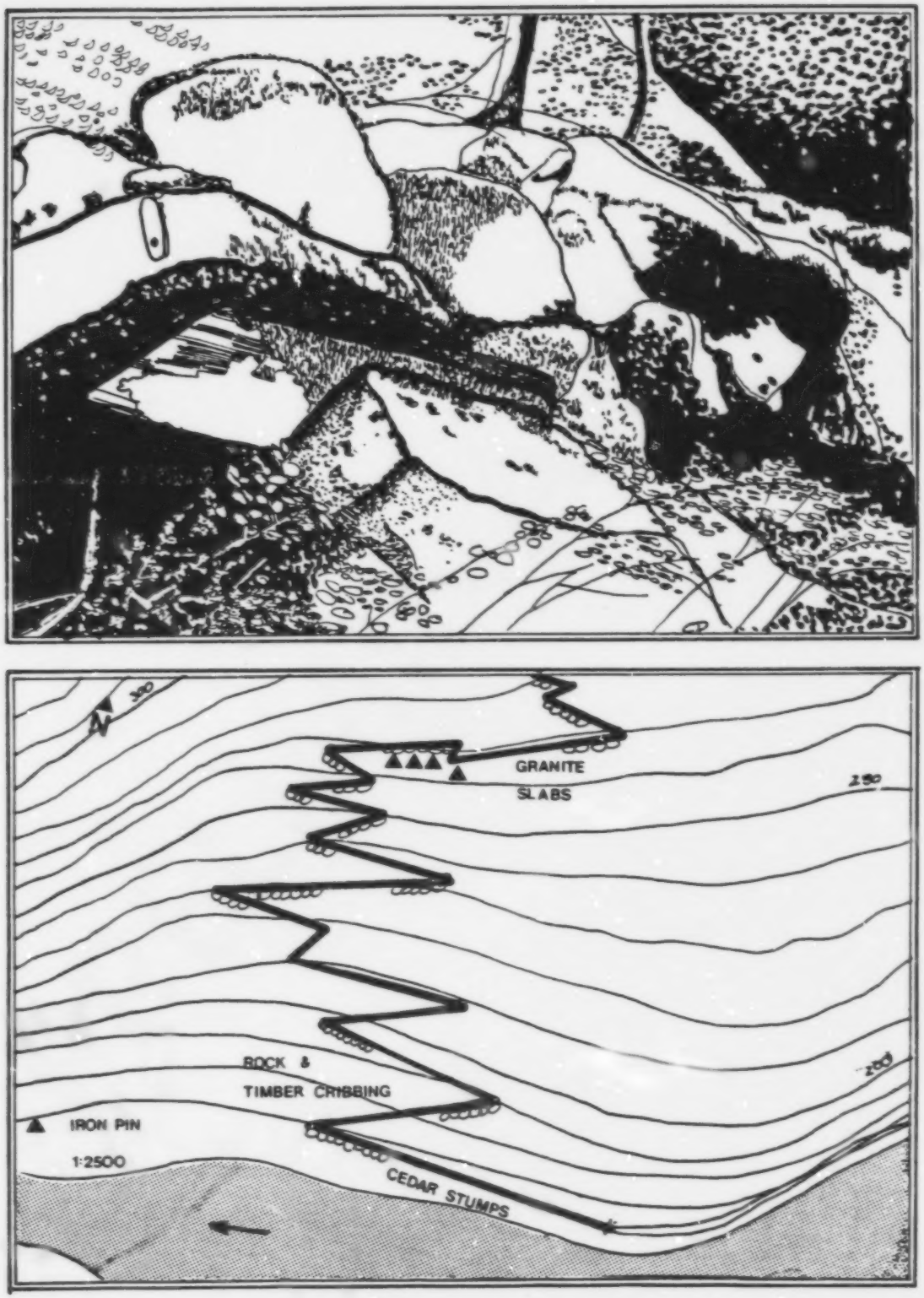


Figure 9 LOWER DESCENT SECTION

5.2.2 Physical Evidence

(v) Below the Bluff Section

The trail proceeds upstream for 200 m to the base of a large bluff in Waddington Canyon. The trail in this section begins at the base of the cedar hemlock gulley described above, across a blank slab section to a natural bench. From this bench a 60 m section was blasted at the base of the overhanging cliff and an elaborate timber lattice, partly suspended and partly supported on timber cribbing in the river, was constructed. This section connected to the open terraced river bends above the canyon by a short section of rockwork constructed of slab debris from the cliff.

The initial portion of this section exhibits no evidence of any trail construction activities. The blank slabs dip steeply and directly into the river at the downstream end of a vegetated river bar which appears reasonably stable. The large number of cut stumps at the bottom of the cedar hemlock gulley, described above, suggests that a timber structure was used to bridge this section (which has subsequently been destroyed). It is also possible that the river bars have also shifted location in the last 120 years. At any rate, upstream of this section beginning with the river bar the trail proceeded on a bedrock bench which consists of dry stonework on top of bedrock. Downstream access to the river bar had to be blasted. Upstream, after traversing the bench for 20 m, the trail passed onto the 60 m blasted section. It is this portion of the trail that is featured in the period photographs of Grimsby.

The section which required extensive blasting is at the base of the overhanging bluff at the upstream end of the canyon on the outside of the riverbend as it enters the canyon. The first structure constructed here was destroyed by the following spring flood. It was reconstructed several months before the Chilcotin massacre at Murderer's Bar and presumably washed out again the next year.

This section of trail has seven examples of iron work consisting of rods placed above the blasting surface for construction purposes and in several locations the pins are placed into holes drilled into the rock to support causeway timbers directly. The historic photographs of this section indicate that two different types of timber causeway were used. The upstream section (30 m) was tied directly to the blasted rock ledge while the downstream section (30 m) was supported by timber structures placed directly into the river.

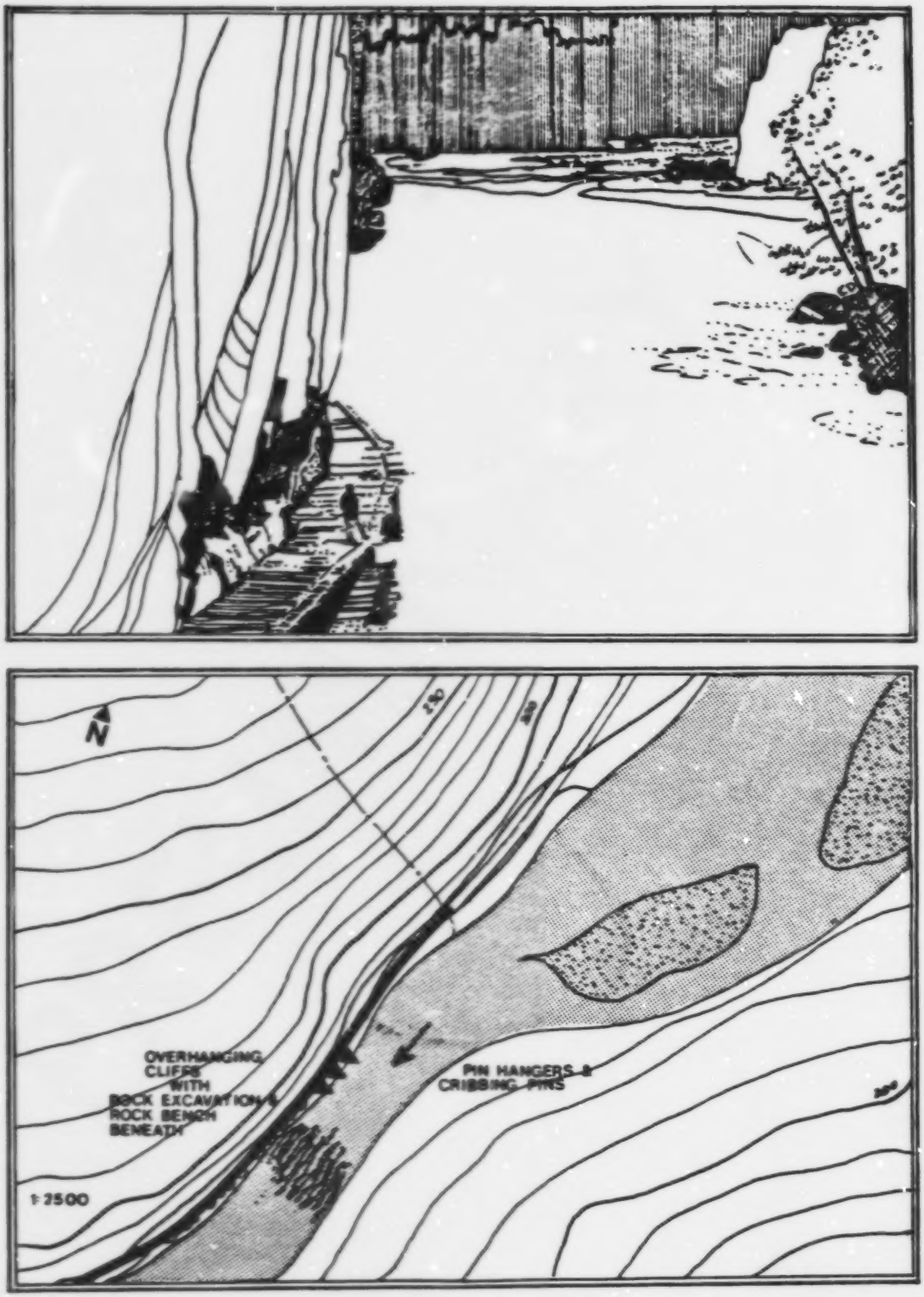


Figure 10 UPPER CANYON SECTION

5.2.2 Physical Evidence

(vi) River Terraces and Low Bluff

For three kilometres above the canyon the trail is indistinct. The first kilometre has been obliterated by relatively recent rockfall. Above this section there is a large creek sorted by the common wet site cedar thicket. It is inferred that this creek confluence was a major campsite during construction of the trail. Physical evidence of subsequent use of the site is ample although the creek has recently changed course and there are several buried humous layers covered by sand lenses and gravel deposits. Upstream of this creek the trail follows a river terrace which is comprised of fluvial sediments deposited in the lee of a low bedrock outcrop that confines the river to the opposite side of the valley. The trail can be followed on along the upper terrace until it pinches out against this low bluff, then descends to the river shoreline and skirts below the bluff on small terraces which are being quickly eroded away. The Spittle survey mapped the trail in this section traversing high over this bluff but there are several very short dry stonework sections below the bluff which connect directly with the rockwork sections upstream of the bluff. One open slab is traversed right at the apex of the river bend.

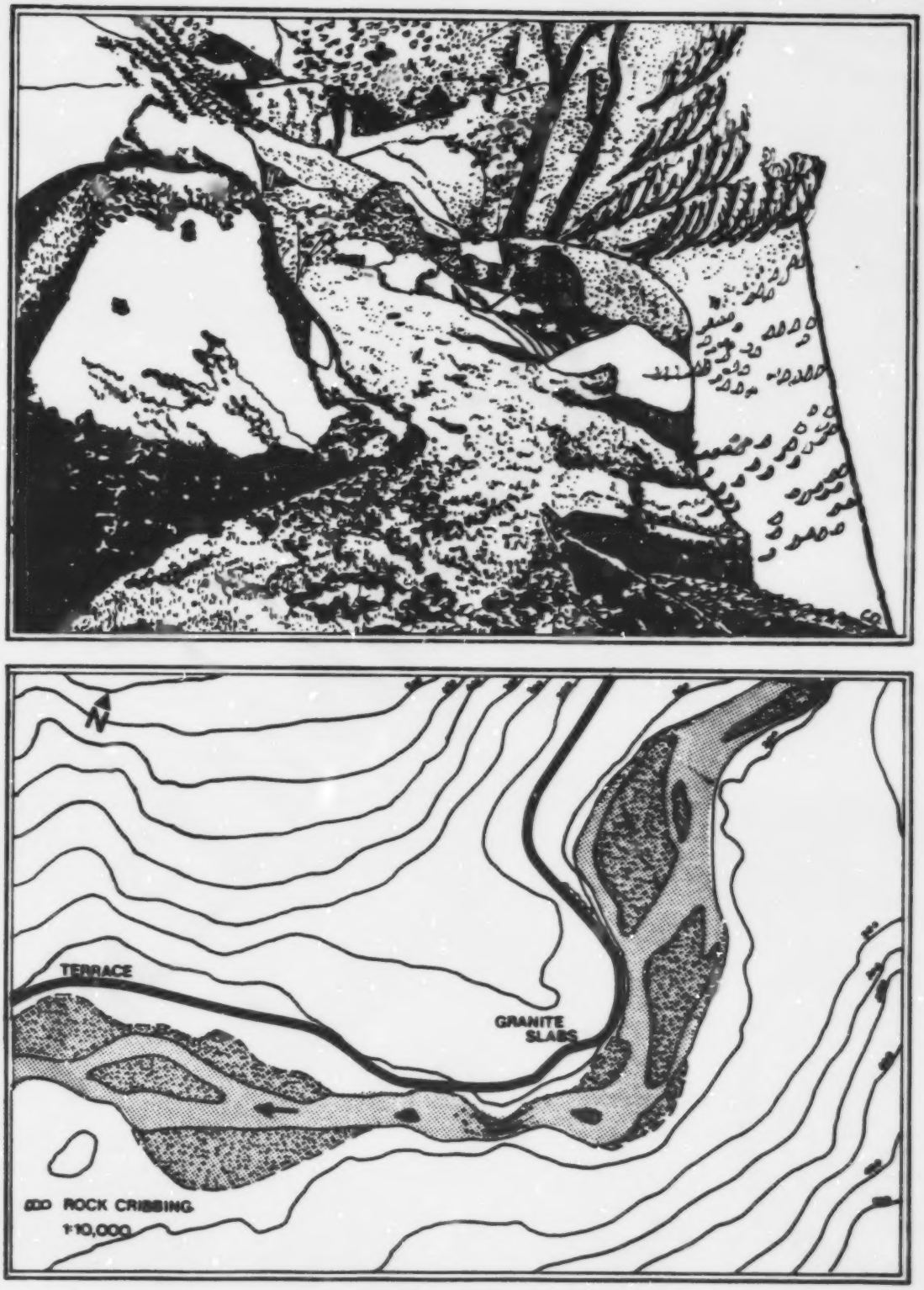


Figure 11 TERRACES TO LOW BLUFFS

5.2.2 Physical Evidence

(vii) Low Bluff to the Terminus

Upstream of the river bend the trail is well defined by rockwork on gently sloping terraces below the bluff. It descends off this terrace along an excavated ramp to another cedar thicket associated with a small creek. It then is indistinct across a drier terrace to the base of another precipitous cliff. Along the base of this cliff the trail is constructed of large rounded cobbles. It then traverses up and over very old consolidated talus and then down to Rasmussen's Creek and Murderer's Bar. There are two round bar pins at the transition point from the constructed cliff base trail to the slabs and the talus. The purpose of these pins is not clear but presumably they supported timbers.

The Rasmussen Creek confluence with the Homathko River is commonly felt to be the probable site of the Murderer's Bar incident although this has never been clearly identified and no grave sites have ever been located. There is evidence of subsequent use of the area as a campsite and a split cedar plank bridge, now destroyed, was at one point used to cross several distributary channels or the Rasmussen Creek fan. This fan is overgrown with very large cedars and some cottonwoods and it is clear that Rasmussen Creek has been rapidly changing its location year by year. The whole area is a maze of relic channels and active erosion gulleys. It is unlikely that physical evidence of past use or occupation remains.

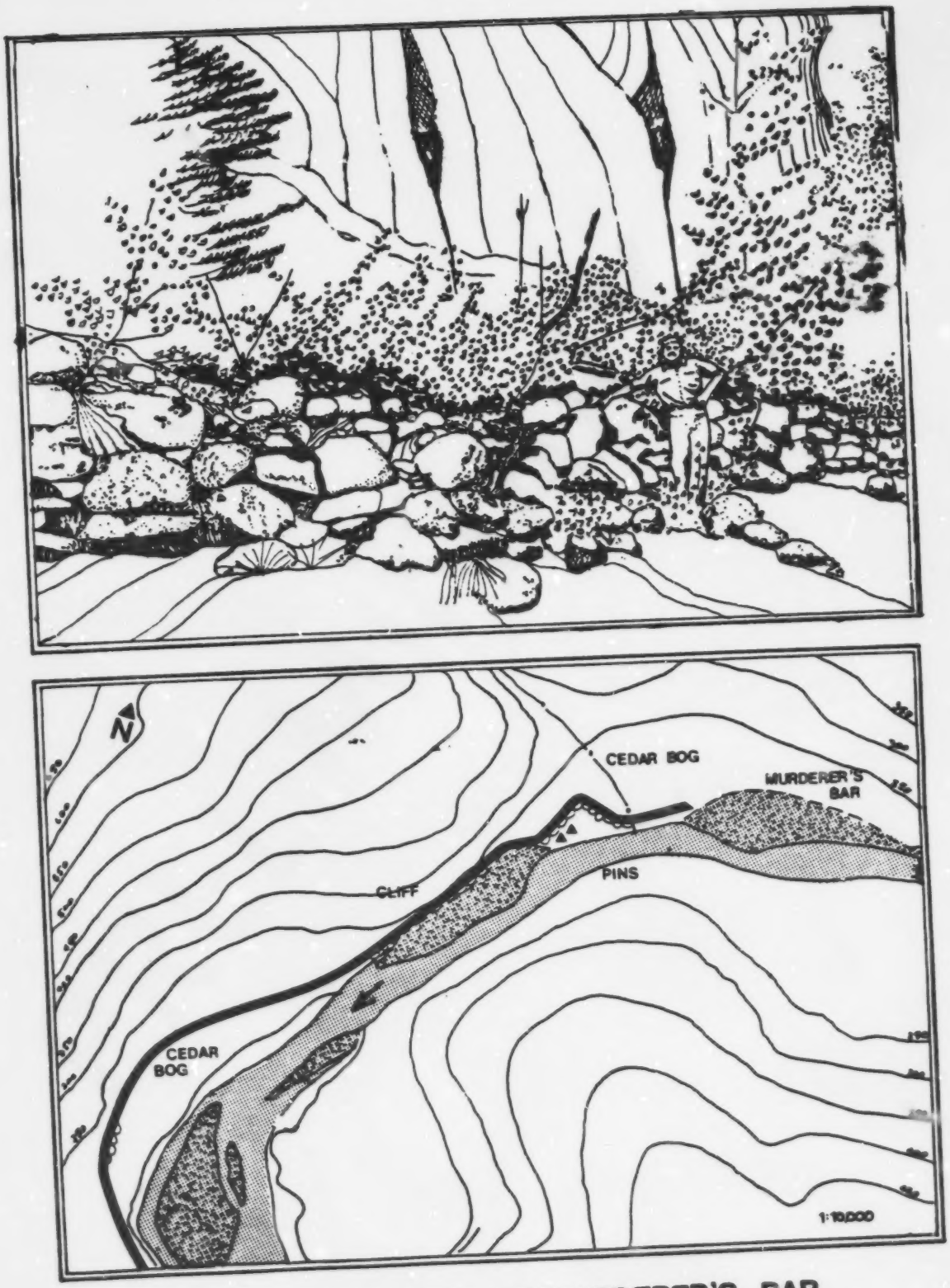


Figure 12 LOW BLUFFS TO MURDERER'S BAR

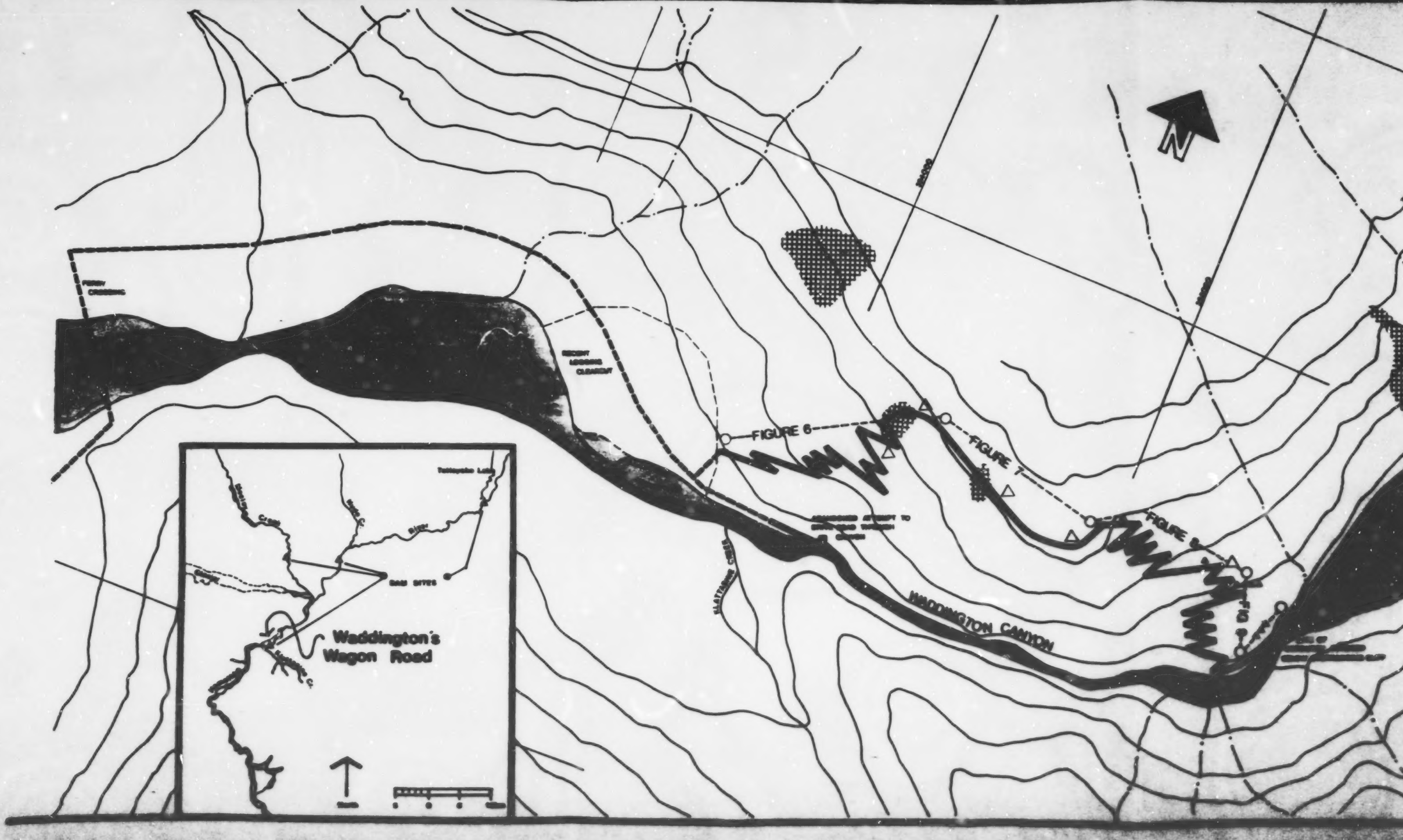
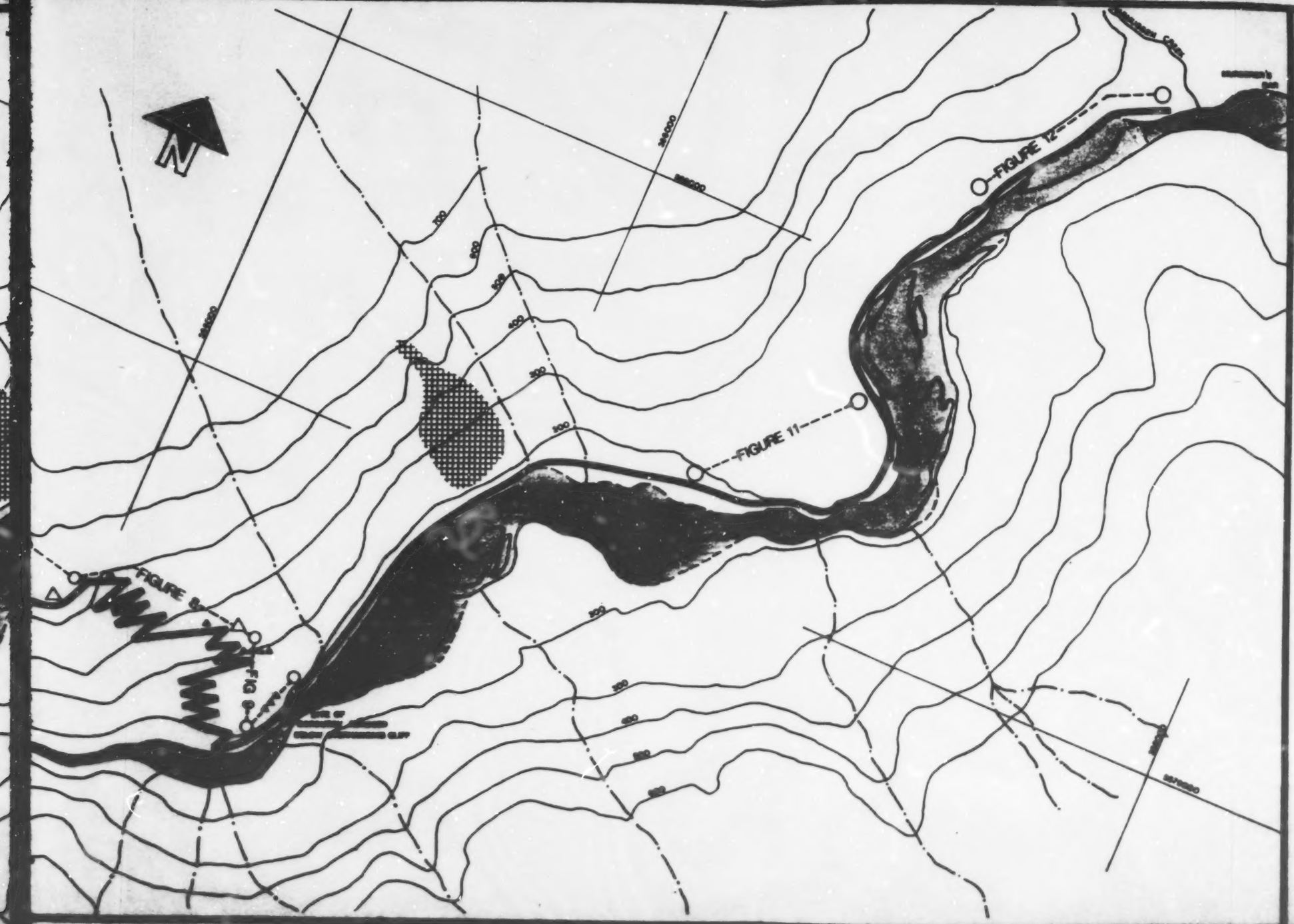


FIGURE 6
FIGURE 7
FIGURE 8
WADDINGTON CANYON
Waddington's
Wagon Road



Alfred Waddington's Wagon Road

Homathko River

Ferry Crossing to Rasmussen Creek

Figure 13

5.2.3 Degree of Preservation

There are four basic categories of preservation of physical trail evidence which correlate well with the local environmental characteristics (Table 2). The degree of preservation within each varies because the construction technique varied with the drainage characteristics and the presence or absence of bedrock.

5.2.4 Significance

The purpose of this investigation was primarily aimed towards completion of an inventory of the physical evidence remaining from the construction of the wagon road. No attempt was made to assess the significance of this evidence, except in a most general way. To undertake such an assessment will require investigation of period construction techniques and an evaluation by a professional historian.

TABLE 2 Degree of Trail Preservation

	Environment	Construction Technique	General Level of Preservation
1.	Bedrock		
	shallow slope	dry stone work piled on surface (sometimes supported by ironwork and timbers)	good (some slippage)
	steep slope	blasting & filling	good/moderate
2.	Wet Cedar Hemlock Bogs	timber cribbing & rock work	moderate/poor and overgrown (timbers have survived in several areas)
3.	River Shoreline		
	bedrock obstructed	blasting, filling & timber cribbing	poor (evidence blasting only) & iron work
	unobstructed	rock work using river cobbles	moderate/ obliterated
4.	River Terrace	some earth excavation	moderate

5.3 Prehistoric Sites

5.3.1 Results of the Tatlayoko Lakeshore Survey

In total, by incorporating the results of the judgemental survey and the probabilistic survey, 18 prehistoric sites and 1 historic site were recorded around the perimeter of Tatlayoko Lake. Three contemporary sites were located but not recorded on B. C. Archaeological Site Inventory Forms.

There appears to be an equal distribution of sites around the lake with 10 on the east side of the lake and 9 on the west. All but 2 sites are associated with terraces or promontories overlooking the lake and 75% are associated with small stream confluences with the lake. The two sites not associated with these features were located on exposed side hills, on the west side of the lake.

Five of the documented sites are associated with cultural depressions while 11 contained lithic material. It is important to note that of the recorded circular depressions, only 2, EiSc-2 and EiSc-5, include the circular depressions common in the Chilcotin/Cariboo. The remaining 3 sites are not well defined and have been classed as circular depressions as their existence could not be explained by natural causes. It is possible that they functioned as winter cache pits or depressions for partial subsurface houses.

Five of the 19 sites were located as a result of the stratified random survey while the remaining 14 were documented by judgemental survey. Site characteristics are summarized in Table 3.

TABLE 3 Site Characteristics - Homathko Study Area

	EhSi -3	EiSc -7	EiSc -6	EiSc -5	EhSe -1	EhSf -2	EhSf -1	EiSd -1	EiSc -5	EjSc -10	EiSc -4	EiSc -3	EiSc -2	EjSc -11
Judgemental	X	X	X	X	X	X	X	X	X					
Sample										X	X	X	X	X
Historic	X					X	X							
Prehistoric		X	X	X	X			X	X	X	X	X	X	X
Lithic Material		X						X			X	X		X
Isolated Find		X												
Circular Depression			X	X	X				X	X			X	
Lakeshore		X	X	X				X	X	X	X	X	X	X
Promontory/ Lakeshore								X	X			X		X
Protrusion into Lake													X	
Sheltered Bay														
Stream/Lake Confluence		X												
Stream/River Confluence					X	X	X							

TABLE 3 Site Characteristics - Homathko Study Area, Continued

	EjSc -12	EjSc -13	EjSc -14	EiSc -1	EiSq -1	EiSq -2	EjSf -1	EjSc -4	EjSc -5	EjSc -6	EjSc - 7	EkSc -3	EjSc -8	EjSc -9
Judgemental	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sample														
Historic		X		X	X	X	X				X			
Prehistoric	X	X	X					X	X	X		X	X	X
Lithic Material	X	X	X	X				X	X	X			X	X
Isolated Find												X		
Circular Depression												X		
Lakeshore	X	X	X	X				X	X	X			X	X
Promontory Lakeshore	X	X	X					X	X	X			X	
Protrusion into Lake		X	X											
Sheltered Bay	X	X	X	X				X	X	X				
Stream/Lake Confluence			X					X		X				X
Stream/River Confluence					X	X								

EiSd-1

Site EiSd-1 is situated in the Bowl Lake vicinity and was located in the course of the judgemental survey. The site is situated on the slope and summit of a predominant hill which borders Bowl Lake. In evidence at the site were 2 flakes, one being a primary obsidian cortex flake while the second was a secondary chert flake. Good grazing range exists along the edge of the lake.

EiSc-4

Site EiSc-4 was documented while conducting the lakeshore sample. It is located on the paleo floodplain of Ottarasko Creek, 200 m from the present Tatlayoko Lake level. All artifacts were recovered from two, adjacent 1 x 1 m exploratory test units. In evidence at the site are 2 cortex spalls, 8 secondary flakes, 10 retouched flakes, and one bifacial fragment. This fragment, which is too small to provide morphology to adequately reconstruct a tool, may represent a base portion of a projectile point. All artifacts recovered from the site are made from chert.

EiSc-3

Site EiSc-3 consists of 2 flakes, one being made of obsidian while a second is made of chert material. The site, which was located during implementation of the sample survey of Tatlayoko Lake. The site was associated with an old trail which has not been recently used. Further work should be conducted at this site to firmly establish its dimensions and significance.

EjSc-11

Site EjSc-11 occupies a small knoll on the first terrace overlooking the east shore of Tatlayoko Lake. The flat portion of the knoll site is approximately 10 m x 10 m. The site was located while conducting the judgemental survey of the lake. The site itself consists of 3 basalt flakes, 2 of which are retouch flakes and one is a secondary flake. All artifacts were found on the surface. Test excavation revealed no buried components.

EjSc-12

Site EjSc-12 occupies a sheltered bay on the west side of Tatlayoko Lake. The site consists of two small knolls spaced approximately 50 m apart. This site contained 11 secondary flakes, 19 retouch flakes, 1 projectile point, and 1 point fragment. A more detailed and systematic surface collection should occur at this site.

Specimen EjSc-12 is the basal section of a projectile point. The base possesses a contracting stem, accompanied with a small and poorly defined shoulder. The fraction of evident sides of the point are straight. The point is made from chert material.

Figure 14

Point EjSc-12 is almost a complete point specimen. Consisting of chert, it is 5 cm in length. Its lateral edges are of the incurvate-excurvate form with the notch having been made in the corner. It has been basally thinned and also possesses a slight concave outlined in the base. 2.3 cm in width.

Figure 15

The site most probably represents an extended campsite situation. Most stages of artifact manufacture seem to be in evidence at the site, as well as butchered and burnt bone. In addition, the site is relatively large with more than one hearth in occurrence.

EjSc-14

Site EjSc-14 consists of 2 chert flakes. One flake has been spalled off a tool. The left lateral edge has received extensive battering as if it once belonged to a tool used for chopping. The second flake is a small wedge, possibly used in the making of small bone or wood implements. The site occupies a small bluff situation which overlooks a beach on Tatlayoko Lake. Wind has removed most of the fragile goundcover at the site, leaving an exposure of sand and gravel. The artifacts were located on this exposed ground.

EiSc-1

Site EiSc-1 is represented by both prehistoric and historic remains. The site is located on the west side of Tatlayoko Lake adjacent to a sheltered beach. Prehistoric remains were

found in association with both the beach front as well as a nearby promontory. In evidence is a modified flake and one piece of worked bone. The historic component is represented by a lean-to structure. This structure, which probably dates to the 1940's, consists of a cross beam between two trees. The cross beam has been notched into the support trees, which have subsequently, over time, overgrown around the ends of the notch.

EjSc-4

Site EjSc-4 occupies a small promontory on the east side of Tatlayoko Lake. The site, which is approximately 2 metres above the present day lake level, has been disturbed by logging activity. At the site, one piece of bifacially retouched chert was recovered as well as two secondary flakes and one retouch flake. In addition, one piece of obsidian and one piece of burnt bone were also found. One projectile point was recovered. It is an incomplete side notched specimen, the basal portion of the notch being broken off. The lateral edges of the point give it an excurvate form. Length 32.0 cm; width 2.0 cm. The point is made from chert.

Figure 16

EjSc-5

Site EjSc-5 lies on the east side of Tatlayoko Lake on a well-defined terrace overlooking the lake. This terrace is relatively large, 300 m x 50 m and would provide good facilities (potable water, view, level ground) for people occupying the area. Further work should be conducted at this

locale to completely assess its heritage significance. Recovered from the site were 4 secondary chert flakes, one worked obsidian flake and one piece of ground stone. The worked obsidian has been retouched on 80% of one of its faces, while, the ventral face has received minor edge retouching. This limited edge retouch is suggestive that the flake was employed in some manner of cutting function after it was spalled off either a core or tool. Flake morphology does not in this instance suggest function. The ground stone implement seems to be a fragment of a sharpening stone. While showing the fragment to local residents, suggestion was made that its shape resembled an older type of ground stone knife sharpening stone.

EjSc-6

EjSc-6 is located on a well-defined promontory looking west over Tatlayoko Lake. The survey recovered four chert flakes, all of which are primary flakes with no evidence of reworking. One point was located. Shovel testing at the locale indicated a very shallow soil horizon (5 cm) with sterile sand located just below the litter layer. The site should be revisited and a detailed surface collection and/or test pit sample program be carried out. Specimen EjSc-6 is a corner notched point, accompanied by a contracting stem with rectangular shoulders. It is manufactured of chert material and possesses excurvate lateral sides. Length 4.40 cm; width 2.50 cm.

Figure 17

EjSc-8

Site EjSc-8 provided 2 obsidian flakes and one projectile point. The site area has been disturbed by domestic land use activities. The terrain around the site is a well-defined flat terrace with a small stream. A second terrace is approximately 400' above the first terrace. Both should be more thoroughly investigated as there is good potential for the existence of a significant site. Point EjSc-8 was broken in three fragments. It is composed of chert, is triangular to excurvate in outline, and side notched. The base has been thinned and possesses a slight concave outline. Length 5.85 cm; 2.00 cm.

Figure 18

EjSc-9

Site EjSc-9 represents the largest prehistoric site located during the 1982 field season. Located at the north end of Tatlayoko Lake, it has been assessed as covering approximately 500 m x 500 m. Recovered from the site are 10 pieces of obsidian and 29 pieces of chert. Of the obsidian pieces, 5 are core fragments, one is a secondary flake and 4 are edge retouch flakes and one projectile point was recovered. Point EjSc-9 is a very finely made small medial-side notched

Figure 19

chert point. The lateral edges below the notch are straight, with the base also being straight. The corners of the point are right angles, producing a box-like form. The lateral edges above the notches are excurvate, creating a triangular outline. Length 2.70 cm; width 1.20 cm.

Site EjSc-9 occupies a favourable camp situation at the end of Tatlayoko Lake. For the most part it is situated ca. 100 m back from the active lakefront where tree cover does exist and would have assisted in protecting the camp against the prevailing south wind. On Tiedemann's map of 1862 an Indian campsite was indicated at this location. Site EiSd-1 may in fact be evidence of that camp, or more likely, it is evidence of a site where people returned regularly. This site will require more survey work to accurately assess its significance.

Burial - Sam Puckett

During the time when the Morris Mine was active, several cabins were constructed in 1906 to facilitate the men working for the mine. One such cabin, located on the present day Moore property, was the home of Mr. Sam Puckett, the mine's blacksmith. Mr. Puckett lived in this cabin year round. During the winter of 1962, Mr. Puckett became extremely ill. He rode his horse around to the north end of Tatlayoko Lake, where he died. He was buried, without a coffin, on a hillside overlooking Tatlayoko Lake on the present day Schooler property (Haines, pers. comm.). Refer to Provincial Site Form EiSc-7 for the exact location.

6. RESOURCE EVALUATION

6.1 Summary of the Heritage Potential and Sites Within the Study Area

6.1.1 Areas possessing high potential for the occurrence of heritage sites (Figure 20)

Areas ranked with high heritage potential require further field inventory and assessment to adequately assess their significance. These areas are located within the presently defined pondage and therefore will be inundated if the project proceeds. Within the study area there are 5 general areas ranked as possessing high heritage potential; the north end of Twist Lake, the Tatlayoko lakeshore, the north end of Tatlayoko Lake, Waddington Canyon, and the Bowl Lake region.

Twist Lake

During the survey of the Twist Lake region, no heritage sites were recorded. It is the consultant's opinion that this poor response for supporting evidence for prehistoric human occupation reflects the survey strategy employed in the area, not the probability of site location or density. The north end of Twist Lake provides good access to waterfowl habitat, deer range and offers the necessities for camp or village sites. It is thought that a more intensive field survey will recover evidence of human activity.

Tatlayoko Lakeshore

As anticipated, the highest concentration of heritage sites was

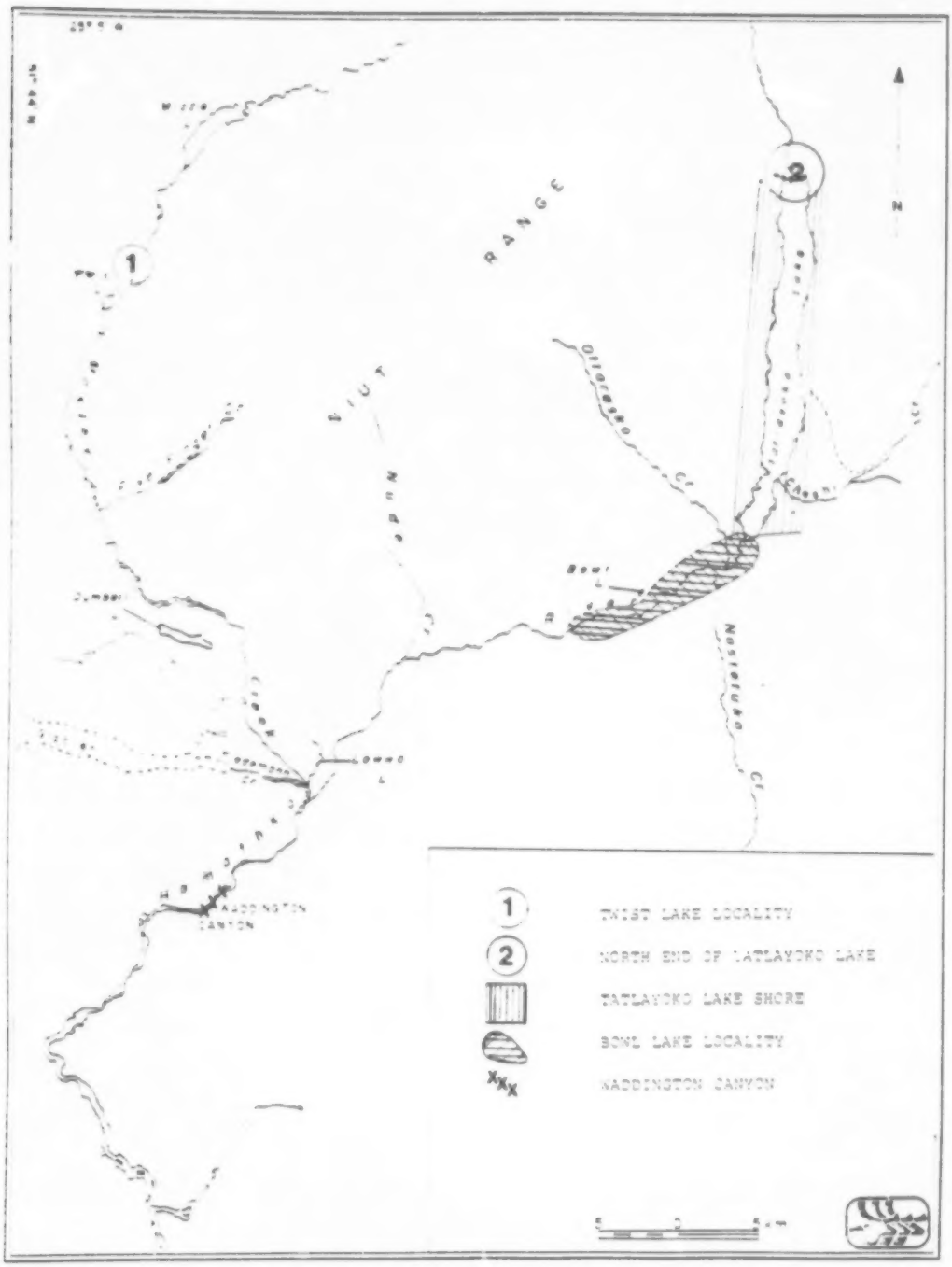


Figure 20: Locales possessing high heritage potential for the occurrence of heritage sites.

associated with Tatlayoko Lake. In total, 19 sites were documented along the lakeshore and inlet and outlets of the lake. Of these, one was historic, 18 were prehistoric. Three contemporary sites were located but not recorded. Of the prehistoric sites 5 were located by the use of a stratified random sample technique while the remaining 13 were located using a judgemental survey.

In the Overview study (B. C. Hydro 1982) and the research proposal survey for this project (Heritage Research Group 1982) Tatlayoko Lake was ranked as having a high heritage potential. This was confirmed in the field survey. More sites were located during the 40 man days of the lakeshore survey than the total 64 work days spent conducting reconnaissance of the remainder of the study area.

North End of Tatlayoko Lake

Of critical importance will be the assessment of the archaeological site EiSc-9, located at the north end of Tatlayoko Lake. This site, which probably represents a village or camp site is located approximately 100 metres from the active lake front. It is at this point that Tiedemann, in his map of the 1862 survey, indicated an Indian camp (Tiedemann 1862). In the limited time spent during the survey at this site, a hearth was located in association with calcified bone, flakes, and projectile points.

Waddington Canyon

The Waddington Canyon area received a high ranking due to the presence of the Wagon Road. The canyon starts approximately 8

kilometres south of the Mosley Creek/Homathko River confluence and continues southwest along the Homathko River to the confluence of Klattasine Creek. For the most part, this section is characterized by canyons and steep valley sides. Few locales accommodate camping. During the seven days when survey crews were locating and mapping the location of Waddington's Wagon Road, the section of land between Klattasine Creek and Murderer's Bar was repeatedly walked. No evidence of aboriginal activity was located. If people used this region in prehistoric times, they were probably in transit, high off the valley floor and probably on the move. It would be a one-day walk from the confluence of Mosley Creek/Homathko River to below the canyon. Between these two spots little exists to encourage camping or an extended stay.

Bowl Lake Area

The area from the south end of Tatlayoko Lake to Bowl Lake is open rolling country. The terrain is relatively flat with the Homathko River meandering southwesterly into the Coast Range. In this section of the river are two major tributaries, the Ottarasko, draining in from the west, and the Nostetuko, draining from the south. This area offers prime deer hunting. The open south facing slopes, lowland meadows and the presence of small mineral lakes provide ideal habit for mule deer. Within this area the survey team conducted ground reconnaissance in the immediate vicinity of Bowl Lake. One site was documented, confirming the presence of aboriginal activity in the region. The Bowl Lake region represents the western limit of open range suitable for deer hunting. To the west of Bowl Lake the Homathko River valley narrows and the valley sides become steep. Heritage potential diminishes. Further inventory work is recommended.

6.1.2 Areas with medium potential for the occurrence of heritage sites (Figure 21)

Areas which have been ranked as having medium site potential will require more detailed in-field evaluation. Preliminary studies within the project area have isolated 3 locales having medium site potential (discussed here in their order of nominal importance); locales of major confluence streams, Twist Lake, and Lowwa Lake. Evidence of human activity was found at two of the three locales.

Stream or River Confluences

The confluence of major streams or rivers offer access to transportation corridors, good fishing and traditional meeting places for socio-economic activities such as trade and celebrations. This survey evaluated the confluences of Mosley Creek, the north side of the confluence of Doran Creek, Ottarasko Creek, Nostetuko Creek, and Nude Creek as they join the Homathko River. There was no evidence of human activity found at Doran, Ottarasko or Nostetuko Creeks. Historic cabins were found at the northeast side of the confluence at Mosley/Homathko, and the north east side of Nude/Homathko. No evidence of prehistoric activity was found at any of the above mentioned locales.

The apparent lack of prehistoric remains in these medium potential sites suggests a more intensive shovel and screen testing program beyond that conducted at this preliminary stage. There are terraces at all the confluences. The terraces appear stable, close to potable water and provide a strategic view of the immediate countryside. Prehistoric activity is indicated.

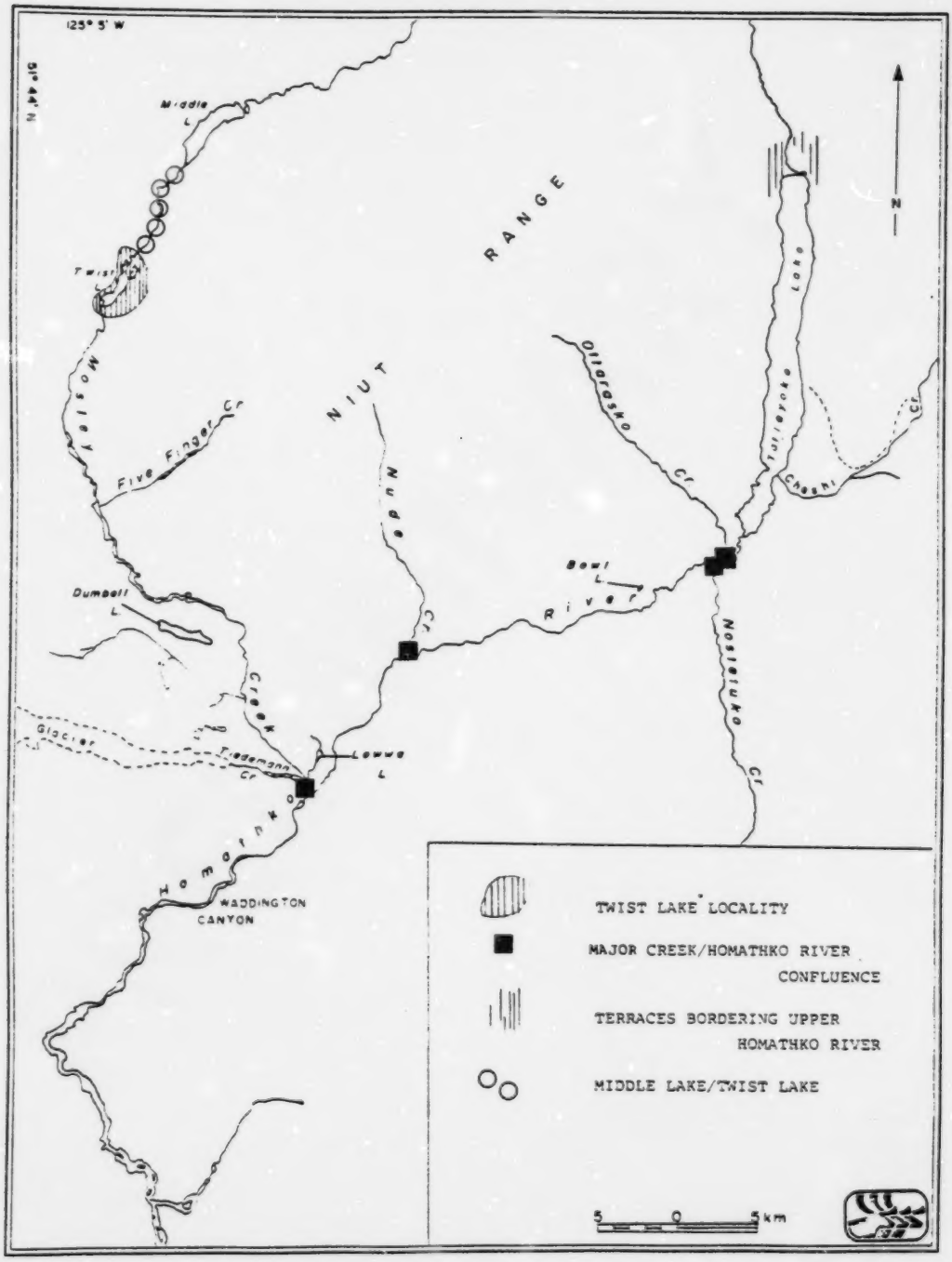


Figure 21: Locales possessing medium potential for the occurrence of heritage sites.

Twist Lake

The south end of Twist Lake, the west shore of Twist Lake and the land lying between Twist Lake and Middle Lake have medium site potential. In the original proposal for this survey, these regions were classified as high potential areas for heritage sites. Field evaluation verified the presence of physiographic features traditionally associated with heritage sites. However, no heritage sites were located. This initial lack of evidence for prehistoric and early historic activity may reflect the need for a more intensive field survey in this area. This area reflects the geographic interface between the western Chilcotin Plateau area and the rugged Mosley Creek. Such an area could then offer a focal point for people moving up and down the valley or hunting this transitional open range land area. Further inventory work at this location would be valuable.

Lowwa Lake

One final locale which was considered as a medium potential site was Lowwa Lake, situated near the confluence of the Mosley Creek and Homathko River. In speaking with local residents (Mr. Tom Chignell) this small lake offered good camp prospects for persons travelling either the Mosley or Homathko. As Mr. Chignell stated; "... among the Indian people Lowwa Lake was referred to as 'peaceful place'. While travelling, people would spend a few nights camping at Lowwa Lake to get away from the continuous roar of either Mosley Creek or Homathko River". Ground survey crews checked the entire lake area and located no heritage sites. No further work is required at this site.

6.1.3 Areas possessing low potential for the occurrence of heritage sites (Figure 22)

B. C. Hydro's Heritage Overview of the Homathko Development study area (B. C. Hydro 1982) ranked the Nude Canyon area as possessing medium to low heritage potential. Subsequent field reconnaissance confirmed the low ranking and delineated further areas in the study area which can be classified as possessing low heritage potential for the occurence of sites. This classification does not necessarily mean that there are no sites in the area, but that those which do exist are of extremely low density, of small size, difficult to locate in terms of time/cost requirements, and offer a limited contribution to the overall understanding of past lifeways. It is the consultant's opinion that locales designated as possessing low heritage potential do not require further field survey for the feasibility stage of the Homathko Development studies.

The locales assessed and field checked as possessing low heritage potential are presented in Figure 22. It may appear that a significant amount of the study area has been assigned a low heritage potential. This is primarily due to the fact that much of the area possesses steep walled canyons, steep sided river valleys, confluence areas with active braided streams, swamps or inaccessible survey terrain.

Nude Canyon

The Nude Canyon region, an area of low heritage potential, runs from the Bowl lake area to near the confluence of the Mosley Creek/Homathko River. Almost without exception (e.g., the confluence of Nude and Doran Creeks with the Homathko River)

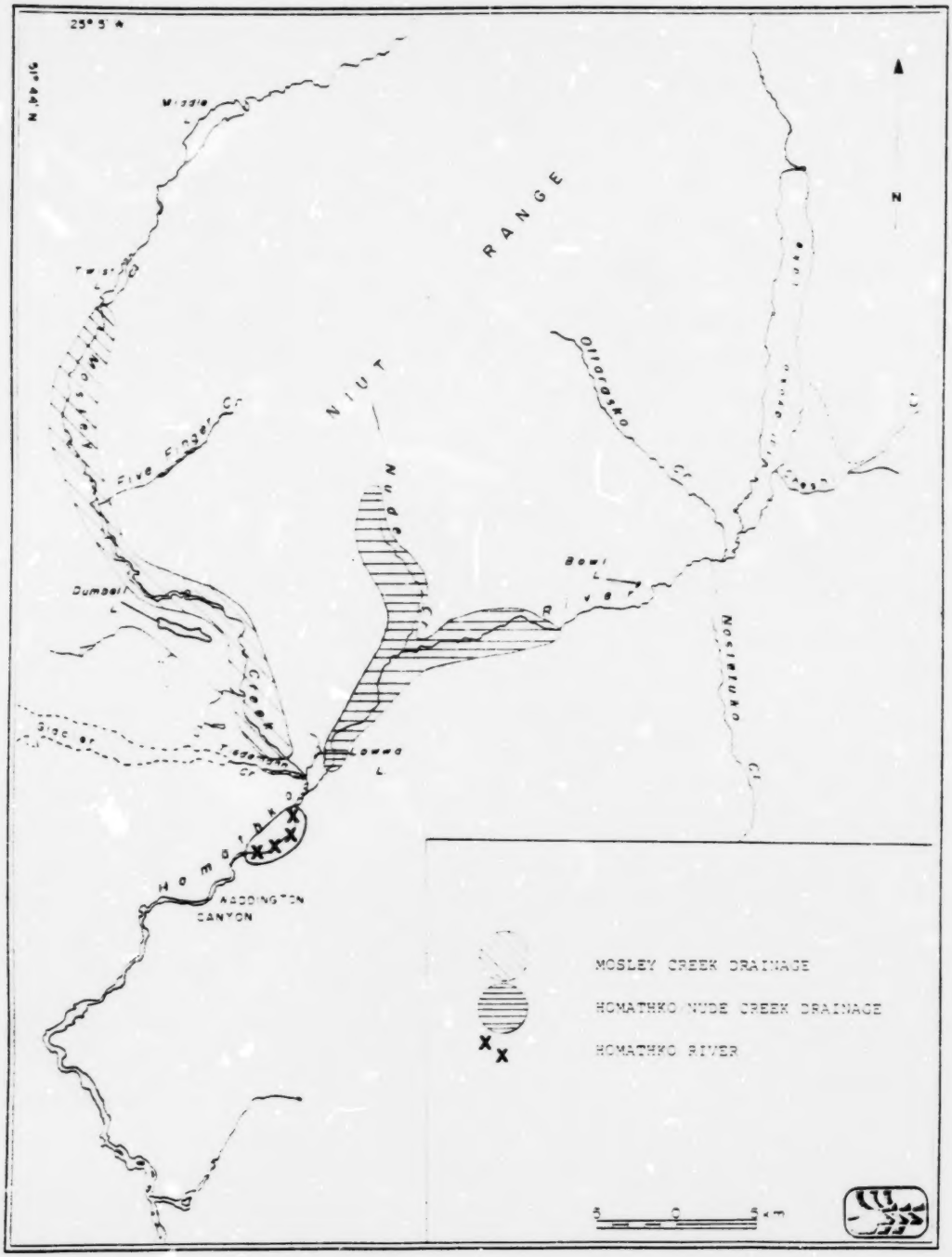


Figure 22: Locales possessing low potential for the occurrence of heritage sites.

this region is typified by river canyons or steep 'V'-shaped valleys. The area offers few, if any, resources to persons utilizing the area for any purpose other than trapping fur-bearing animals. There are few natural ground exposures and the litter mat layer is generally thick. This coupled with the rugged terrain has contributed to its low heritage potential designation.

Mosley Creek Corridor

The second area of low heritage potential is the Mosley Creek corridor. For the most part this corridor consists of canyons, active braided streams and swamps. Mosley Creek canyon is approximately 10 km in length, extending from the vicinity of the Mosley Creek/Homathko River confluence northward, along the river corridor until adjacent to Dumbell Lake. Similar to the Waddington and Nude Canyon area the Mosley canyon offers few locales advantages to the establishment of prehistoric sites. The river occupies a narrow valley which is not conducive to travel. Northward along the river, the valley opens to a width varying from a few hundred metres to two or three kilometres. This area is characterized by meadows, swamps, tributary stream channels and a limited amount of open dry terrain.

In brief, the present physical environment of the Mosley Creek corridor does not contain elements advantageous to human occupation. A limited human penetration occurred with the advent of the early explorers and fur trade, but no evidence suggests a dense aboriginal population.

6.2 Preliminary Discussion of Site Significance

6.2.1. Introduction

The designation of site significance is fundamental to the assessment of heritage sites and subsequent development of any management and mitigation policy. Site significance is determined by the amount of information a site can potentially provide, including the physical evidence as well as its relative spatial and temporal position. Within B. C., reference criteria for ranking the value of such information and determining site significance has been discussed, in a general manner, by Ball (1978), Simonsen (1979), Spurling (1979), Reeves (1980) and most recently by the Heritage Conservation Branch (H.C.B.) in their Guidelines for Heritage Resource Impact Assessment in British Columbia (H.C.B. 1982).

These reference criteria weight the nature of the site in regard to its potential contribution to a number of interest areas such as the scientific community, public education, ethnic significance and historic and economic significance (H.C.B. 1982). The purpose of the 1982 heritage program was to identify and evaluate, on a general level, regional heritage ranking identified in the Heritage Overview studies, as well as to conduct inventory and site assessment studies. It was not within the mandate to finalize a discussion on site significance. Before the advent of the 1982 heritage program there had been no previous heritage work conducted in the area. With the absence of regional comparative studies, the use or implementation of any sophisticated significance ranking and weighting system could possibly prejudge the values of the resource. However, the results of the program will allow

comment on the regional heritage resources in an overview manner with reference to scientific and historic significance criteria.

6.2.2 The Waddington Wagon Road

The significance of the Waddington Wagon Road should be examined with respect to its position within the historic, economic, ethnic, exploration, and social development of British Columbia. The wagon road development represents an era of competition in the development of British Columbia's trade, commerce and transportation. The driving force behind the conception of the wagon road to the Cariboo goldfields was to secure for Victoria, a position of focus for goods and personnel in transit to the interior.

Socially and ethnically, the development of the wagon roads vividly brought into focus the conflict/contact situation which characterized economic and industrial development of frontier areas. The construction project represented a thrust into the regionally well-known and recognized conservative Chilcotin territory. The Chilcotin people had successfully rejected previous attempts at Euro-Canadian development in this area (e.g., missions and fur trade forts). The development of the wagon road, the killings and subsequent pursuit and apprehension of the murder suspects significantly altered this dominant resident perspective. After the events of the "uprising" the Chilcotin people were less likely to pursue an armed response to development penetration into their traditional area.

The key factor necessary to determine the significance of the Waddington Wagon Road is to determine the significance of the physical remains of the trail. To accomplish this, it is necessary to know the uniqueness of these remains. It is the section of physical remains of the trail which will be inundated and significance should be determined in a separate sense than the previously mentioned associated non-material significance criteria. To determine this significance, comparative studies should be undertaken to compare the stone work of Waddington's trail with other provincial historic stone work sites. The existence of representative stone works elsewhere in the province would have a bearing on the significance ranking and subsequent mitigation policies.

Further study should consist of two parts. The first part would evaluate the significance and uniqueness of the site within the historic trail component of the history of British Columbia. The second part of the study would evaluate the significance of construction impacts under such subject headings as its role in ethnic conflict, engineering technology, as well as socio and economic expansion. To achieve its results, this two-part study requires an exhaustive review of documentary sources and discussions with persons competent in relevant fields. No field work need be undertaken to complete this two-part study. At a latter stage of project development, a detailed photographic documentation may be required at the site.

6.2.3 Historic Cabin Sites

The significance of the historic cabin sites documented for the Homathko Development study area is best determined by reference

to criteria based on socio-economic variables. For the most part, the sites are representative of early homestead life, early mining exploration, as well as reflecting aspects of the late fur trade economy. In overview, the historic cabin sites are not impressive in their potential to contribute to the understanding of the historic development of British Columbia viz. none of the sites is unique in structure, event or magnitude.

The single site representative of the mining period, site EiSc-1, is reputed to have been built as an exploratory base camp by Mr. Finney in the prospect surveys which established the now abandoned Finney mine. This cabin has long been abandoned by Finney, and has been refurbished by local residents to accommodate overnight stays while they ride range or hunt. Only the structure itself remains of original material representative of the early exploratory period.

Little evidence remains of cabin site EjSf-1, representative of the early homestead period, or site EhSf-1 representative of the early hydro surveys.

Sites representative of the fur trade economy are all in a relatively good state of preservation. These cabins, which were spaced a day's travel apart, provided the trappers with stop-over facilities, and a place to process their furs and prepare for the next leg of their trip. Within the Homathko Development study area, possibly due to the remoteness of the region, these cabins have not been vandalized. The significance is derived from their good state of preservation, their representativeness of the late era of the independent fur trapper.

6.2.4 Prehistoric Resources

The significance of the prehistoric sites is principally determined by the artifact content and provenience. A site possesses a low significance if it is represented by only a few lithic flakes lacking a depth provenience, suggestive only of ephemeral activity. With a surface site it is extremely difficult to date or provide a context for the sites. A surface assemblage possesses a high probability of being temporally mixed or disturbed. A site possessing temporal control is more significant.

Prehistoric sites possessing controlled three-dimensional provenience are rare in the southwest Chilcotin. This reflects the fact that heritage studies in the region are a relatively recent phenomenon. As a result, within the Chilcotin region at this time any information that a site can provide concerning the past life ways of the aboriginal people is significant to further and more adequately determine the significance of a prehistoric site within the Homathko Development study area. However, a rigorous documentation regarding site content and spatial provenience is required. To accomplish this, it will be necessary to obtain understanding of the regional heritage resources as well as conduct detailed studies at specific sites which have been identified in the inventory stages of study.

7. PROJECT EVALUATION

7.1 Methods

The purpose of the survey design for the Homathko Heritage Program was to conduct heritage site inventory, assessment and field evaluate proposed regional heritage ranking. To accomplish this goal, both judgemental and probabilistic sample survey techniques were employed. In this manner, a preliminary overview perspective of the entire project area was achieved, and it is now possible to forward preliminary comments with regard to potential occurrence of heritage sites. The heritage potential rankings of low, medium and high have been defined such that future detailed studies may be restricted to the well defined areas of high or medium site potential. There is no need to survey areas deemed as low heritage potential.

Both the B. C. Hydro Heritage Overview report (1982) as well as the proposed survey strategy for this year's work predicted an overall regional low site density for this project area. This was confirmed by the field program. There was an increase in the specific amount of project area designated as having low heritage potential. This increase was primarily in the Mosley Creek valley where our field evaluation now ranks the entire drainage as possessing low heritage potential. Areas of high and medium site potential were more clearly delineated.

The low frequency of sites containing circular depressions was not expected. Circular depressions are a relatively common archaeological feature within the Chilcotin district. This absence suggests the Homathko Development study area was sparsely populated, representing a peripheral area for

Chilcotin or possibly Shuswap people. It is possible that the project area was simply not settled during the winter months, or at least not by people building the traditional prehistoric pit houses.

The field inventory strategy incorporating two, two person field teams functioned well. The teams, which were always in radio contact with each other and with the project helicopter, proved an effective means of completing the evaluation of specific locales and survey traverses. The consistent use of shovel and screen testing provided the only reliable means of locating subsurface sites. The screen size, 0.62 cm, proved effective and practical in damp soils.

The review of land use documentation proved to be most valuable in the inventory and assessment of the Waddington Wagon Road. Spittle's previous trail locational work (1978), aided the survey team, concentrating the reconnaissance of the trail in the previously unlocated sections, thus creating a much improved inventory of the resource.

Very little of the existing archaeological information, with the exception of Matson's current Choelquoit Lake study, proved of significance to the understanding of the prehistoric resource base, or pertinent to the design of the survey strategy.

7.2 Report Evaluation

The terms of reference presented in the 1982 B. C. Hydro Homathko Development Generation Prospectus include both general and specific work requirements, the latter being subdivided into Phase I and Phase II. The Phase I work program was completed during the 1982 field season, while the Phase II program remains to be initiated.

In summary, the overall objectives were to:

(1) Identify and evaluate heritage resources within the project area;

(2) Identify and assess potential impacts, and

(3) Recommend alternatives for managing unavoidable impacts.

The scope of work completed to date (Phase I) is as follows:

(1) Field evaluation of locales designated as possessing high heritage potential. These areas were identified in the Homathko Development Heritage Overview Study (B. C. Hydro 1982b).

(2) Shovel testing of known and potential archaeological sites.

(3) Cursory examination of areas identified as potentially containing medium and low heritage potential.

(4) Document Waddington's Trail. This task included photographic records, detailed trail survey and mapping, and description of trail features.

The 1982 heritage field program satisfied the terms of reference detailed in the 1982 B. C. Hydro Development Prospectus and the Heritage Inventory and Assessment Overview Review (B. C. Hydro 1982b). The results of this evaluation are presented in Section 6 of this report. The 1982 field program significantly refined the designation of an area's heritage potential. Field surveys provided an increase in the land area assessed with low heritage potential. Areas designated as high heritage potential remained largely the same, but were more precisely delineated.

In regard to the identification of known and potential impacts, all drill sites were field surveyed (see Section 5 of this report). It has been recommended that proposed drill sites continue to be field evaluated only if they lie within regions designated medium and high heritage potential.

The results of detailed inventory and assessment of Waddington's Wagon Road are presented in Section 5.

8. RECOMMENDATIONS

The 1982 inventory and assessment program provides a preliminary understanding of the heritage resources located within the study area of the Homathko Development. Specific areas have been identified that potentially contain significant heritage resources and that will require further study. Such areas are:

8.1 Exploratory Drill Sites;

8.2 The Waddington Wagon Road;

8.3 Further Detailed Study in the Tatlayoko Lake Valley;
- 8.3.1 Future Survey Design,
- 8.3.2 The South End of Tatlayoko Lake to Bowl Lake,
- 8.3.3 The Tatlayoko Lake Shoreline,
- 8.3.4 The North End of Tatlayoko Lake,
- 8.3.5 Additional Important Sites in the Tatlayoko Valley,

8.4 Access Roads and Project Infrastructure;

8.5 Historic Sites;

8.6 Additional Site Specific Investigations;
- 8.6.1 The Northeast End of Twist Lake,
- 8.6.2 The Homathko/Mosley High Traverse,
- 8.6.3 Stream and River Confluences.

These studies would be undertaken if investigations of the proposed Homathko Development proceeds at a more detailed level of study.

Further to the recommended studies above, it is suggested that B. C. Hydro initiate a regional ethnohistoric and local history program. The incorporation of aural history programs offer the potential to greatly contribute to the understanding of the regional heritage resources.

8.7 An Ethnohistoric Program;

8.8 Local History Studies.

8.1 Exploratory Drill Sites

It should not be necessary for B. C. Hydro to carry out further heritage assessment work at the drill sites at Nude, Mosley or Waddington Canyons unless new sites are chosen that are not on steep bedrock slopes. The sites assessed in these locations were largely on exposed bedrock in confined canyons and contained no identifiable heritage resources.

It is necessary that further assessment occur at exploratory drill sites for the Tatlayoko Storage Project. Physical heritage evidence was located at the south end of Tatlayoko Lake (EiSc-4, EiSc-7) and the area has a high heritage potential (see discussion following in 8.3.2). We understand that several dam sites are under consideration in this area and recommendations follow concerning survey designs.

8.2 The Waddington Wagon Road

The assessment of impacts due to Waddington Canyon Projects on the Waddington Trail should involve 3 components:

a) Physical Impact - Once the precise determinations of the size and location of the dam sites are complete, it will be relatively easy to inventory the material loss of cultural evidence. In advance of this precise determination, it is estimated that at least 75% of the existing physical evidence of the trail will be inundated. This includes most evidence of timber cribbing, iron work and evidence of blasting. The balance, the long traversing section likely to be above the pondage level, would only be affected if construction activities or access routes occurred above the reservoir.

b) Assessment of Material Significance - The physical remains of the Trail represent a period of construction and mining technology which is significant in British Columbia history. Assessment of significance will require consultation with professional historians. An appropriate mix of preservation and salvage interpretation may then be determined on the basis of this assessment.

c) Assessment of Cultural Significance - The incident at Murderer's Bar is a significant event in the evolution of the native/non-native relationship within British Columbia. The extent to which further interpretation of these historical events can be made requires further use of the physical evidence and more investigation should occur.

The precise site of the graves (if they exist) at Murderer's Bar has never been determined. Further field checking accompanied by further journal and literature searches may be able to pinpoint the location. Potentially these might rank very highly in the public mind as a

heritage site. Little is known of the nature of the burial or whether surviving family members exist and/or are cognizant of the events of the Chilcotin Massacre.

It is recommended that a further reconnaissance be undertaken to determine the extent of physical evidence of the graves at Murderer's Bar.

8.3 Further Detailed Study in the Tatlayoko Lake Valley

8.3.1 Future Survey Design

If a decision is made to proceed with more detailed studies, the Tatlayoko Lake Valley should receive a further detailed assessment. As previously stated, the area has been confirmed as possessing high heritage site potential yet it is a large area and it will be necessary to proceed efficiently and conservatively. For licensing purposes it will be necessary that all statistical measures concerning site density and occurrence be valid and experimentally tested.

8.3.2 The South End of Tatlayoko Lake to Bowl Lake

The 1982 field program confirmed the area between the south end of Tatlayoko and Bowl Lake as one of at least medium heritage potential (EiSc-4, EiSc-7, EiSd-1). It is relatively flat and contains a variety of attractive habitats for deer and other game, complemented by mineral licks, open southern exposures and several terraces, ridges and promontories providing lookouts for aboriginal hunting purposes.

The extent of the area which requires further assessment is dependent on the preferred dam site location. If, for example, the Bowl Lake dam site is preferred, then the impact zone of the pondage area is significantly larger than was assessed in the 1982 field program, including for instance the lower end of the Nostetuko River valley.

Given that the medium to high heritage potential of the southern end of Tatlayoko Lake has been confirmed, it is recommended that further inventory and assessment occur to establish the distribution of sites. This survey should be conducted in a manner which will provide the basis of more detailed future studies if and when they are required.

8.3.3 The Tatlayoko Lake Shoreline

Of the sites (see Table 3) located along the shoreline of Tatlayoko Lake the majority will require further inventory and assessment to adequately determine their significance. These sites, which are all situated adjacent to Tatlayoko Lake, have provided evidence to suggest more extensive occupation than was previously anticipated. What is now needed is a more precise evaluation of the spatial dimension of the sites, in particular the depth, and the magnitude and nature of cultural material. The determination of these variables will affect the significance ranking and subsequent mitigation guidelines that will be required if full impact studies proceed at some point in the future.

It is recommended that the indicated shoreline sites be investigated to further evaluate their significance.

8.3.4 The North End of Tatlayoko Lake

The north end of Tatlayoko Lake was originally ranked as a high heritage potential area and this was confirmed by the 1982 field program. Further investigation to delineate the spatial extent of this site and a more complete testing program to determine its depth would be beneficial.

8.3.5 Additional Important Sites in the Tatlayoko Valley

The Tatlayoko Storage Project would raise the present level of Tatlayoko Lake approximately 9 m. This would inundate the primary terrace immediately adjacent to the lakeshore as well as the low lying lands associated with the north end of the lake. All heritage sites located in the 1982 survey program and discussed in Section 5 of this report would be within the impact zone. To place these sites in a valley context, additional inventory work would be required in areas adjacent to the proposed reservoir and include:

a) The upper terraces of the north end of the lake (fishing and seasonal hunting);
b) The upper terraces along the east side of Tatlayoko Lake (seasonal hunting);
c) The alpine regions of the Potato Range (wild potatoes); and
d) The Stikelan and Cheshi Pass areas (travel corridor for Chilko Lake).

It is not possible to establish the integral value or significance of a heritage site without general regional

perspective. To place the Tatlayoko Lake shoreline sites into context a limited amount of heritage inventory and assessment work should be conducted in the above areas to help confirm the relative importance of the sites that would be destroyed by flooding. It is therefore recommended that a judgemental survey of the additional physiographic units be completed.

8.4 Access Roads and Project Infrastructure

The inventory and assessment of heritage resources is designed to provide general information about the heritage resources of the project area and to propose more detailed studies of specific significant sites. If B. C. Hydro proceeds with its detailed development plans and information becomes available about the specific locations of dams, access roads, transmission lines and other infrastructures it will be necessary to undertake more site-specific investigations. It is recommended that site specific heritage studies for these purposes occur as early in the B. C. Hydro planning process as is practical. The potential for large and significant archaeological sites in the Tatlayoko valley is quite high and it is likely that mitigation or salvage work will be requested by the Heritage Conservation Branch.

8.5 Historic Sites

The inventory of historic sites within the impact area is characterized by several trapping cabins representative of the fur trade economy and early mineral exploration. All documented cabins date from the 20th century and most probably

from the 1920's-1950's. At this time, it is difficult to identify the significance of these sites. However, historic research in B. C. is oriented toward achieving a better understanding of early fur trade exploration activities of the Hudson Bay Company and the Northwest Company and the historic sites fundamental to the economic and cultural development of British Columbia.

It is probable that the historic sites located within the Homathko Development Area are, by themselves, of little significance. Their significance lies in the fact that they represent an era now almost completely lost to British Columbia, that of the independent trapper or prospector, who was not supported by machine power. In the Homathko Development Area, these sites probably present a representative sample of this era. The sites located within the Development Area are in a fair state of preservation. As such, it is recommended that these cabins be completely documented. A photographic record should include both the structure and contents, and a component of the informant program should be devoted to the reconstruction of the life-ways associated with this aspect of the historic record. In this manner, it will always be possible to incorporate the sites into future regional or historic studies.

8.6 Additional Site-Specific Investigations

8.6.1 The Northeast End of Twist Lake

The northeast end of Twist Lake affords excellent camping sites, lookout stations and hunting sites (particularly

waterfowl and moose). It provides one of the few such sites along the Mosley corridor. It is recognized as an aboriginal trade corridor for obsidian but had very little potential for permanent settlement.

No material evidence was located at this location, but the potential is considered to be so high that it is felt further field checking is warranted.

8.6.2 The Homathko/Mosley High Traverse

Several sources confirm that the Homathko/Mosley Corridor was a transportation corridor linking the western Chilcotin plateau and the central coast. From interpretation of topographic maps, helicopter reconnaissance and a limited ground survey in the vicinity of Simitar and Five Fingers Creek, it is the opinion of this consultant that persons travelling the Mosley Creek Corridor would have followed Mosley Creek until in the area of Dumbell Lake, then traversed overland, past the north end of Dumbell Lake and then crossing Tellot Creek. Persons in transit would then probably head west at the 2300' contour and pass two small unnamed lakes. They would then cross the Tiedemann Glacier, again pass two small unnamed lakes and follow Rasmussen Creek to the junction with the Homathko River. This overland traverse would save the traveller numerous hardships and was in fact the route of Schnaar's trapline (Allen, pers. comm.). In addition to easier travelling, this traverse provides the traveller a greater range of food resources (waterfowl, fish, ungulates) than that offered by the Mosley Creek Corridor.

It is recommended that this corridor receive further survey.

8.6.3 Stream and River Confluences

The 1982 field inventory and assessment program did not locate any evidence of aboriginal activity associated with the confluences of Mosley Creek/Homathko River, Nude Creek/Homathko River, or Doran Creek/Homathko River. Evidence of historic activity was found at the Mosley Creek/Homathko River confluence as well as the Nude Creek/Homathko confluence. As discussed in Sections 4.2 and 6.1 of this report, these confluence situations possess good potential for the occurrence of heritage sites. The terraces are well-defined, and their position provides strategic economic and cultural camp situations. The failure of the survey to locate prehistoric sites suggests the need for a more intensive sample program. Such a program would place a survey team at each of the confluences to conduct an intensive shovel/screen based sample program. Such a program would provide adequate study of the locale either to locate a site or support the arguments for low site density. Limited further survey is recommended.

8.7 An Ethnohistoric Program

The past and contemporary land use patterns of the Chilcotin people form an intricate component of heritage studies. The oral tradition possesses information on past land use activity such as transportation routes, trade networks, specific economic activity sites, their density and content. The west central Chilcotin is a culturally conservative region which is only now undergoing significant change. Road access to much of the Indian reserve land has only occurred within the past 20 years.

A well-designed and diplomatically presented ethnohistoric program could service both the Indian community as well as B. C. Hydro. If such a project were to be designed the social impact section of socio-economic services would be consulted and information pertinent to their studies could be incorporated into one program.

It is recommended that this proposal be considered and discussed at an early date.

8.8 Local History Studies

An informant program (Appendix 2) was initiated during the 1982 field season. It was of a preliminary nature with individuals being introduced to the concepts of heritage studies. The program also defined what is meant by a heritage site and showed that someone is actually interested in such things. Contact with some informants is being maintained by mail, but return visits would finalize the documentation and assessment of a number of yet unrecorded heritage sites.

It is recommended that the local informant studies be continued during any future continuation of studies.

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APPENDIX 1: GLOSSARY OF TERMS

Artifact: Any object made by human hands.

Basalt: A form of igneous rock of volcanic origin, characterized by a cryptocrystalline structure. Such structure is preferable for controlled flaking in artifact production.

Bifacial fragment: A fragment of stone bearing flake scars on its ventral and dorsal surfaces.

Blank: An unfinished stone implement that has been partially worked into shape and size of desired tool. Blanks could then be transported for trade or stockpiled for completion at some later date.

Camp: A place of activity where preparation, processing and distribution of cultural items occurs.

Chert: A silicious siltstone possessing desirable fracturing qualities that was used as a raw material for stone tools. It occurs in a variety of colours and often has a waxy texture.

Circular depression: A round pit feature indicative of a prehistoric semi-subterranean house or storage pit. Usually larger depressions are associated with houses and smaller depressions are associated with storage pits.

Core fragment: A non-functional piece of stone material that has been shaped to a predetermined form to allow the removal of a definite flake or blade..

Cortex spall: Any fragment of stone removed from a larger piece of material. Similar character as flake but possesses remnant of natural or outside surface of stone material.

Detritus or Debitage: The non-utilized flakes that are discarded in the manufacture and maintenance of stone tools.

Ephemeral activity: Activity that occurs over a very short period of time.

Ethnography: The anthropological study and description of a particular aboriginal culture.

Ethnohistory: The study of the history of a particular native group. Can be associated with history reconstructed from the memory of elder people.

Flake scatter: Concentration of debitage flakes indicative of specific locale for tool manufcature or maintenance.

In situ: In original location, undisturbed.

Judgemental sample survey: Where the position of a ground surface examination is based on subjective criteria. Essentially, with a judgemental survey you look where, based on the interpretation of certain data or training, you think a heritage site might exist.

Microblade: A long narrow flake with parallel lateral edge, which possesses a length at least twice its width. Length is usually no longer than 2-3 cm. A specific type of blade most generally defined as having a width less than 10 mm.

Obsidian: Volcanic glass, which because it can be worked to an extremely sharp edge and point, is preferable for artifact manufacture. Found in outcrops in remnant volcanoes.

Petroform: A naturally occurring stone form that may resemble an anthropomorphic, zoomorphic or geometric design.

Petroglyph: A carving into stone of anthropomorphic, zoomorphic or geometric design.

Probabilistic sample survey: Where the position of a ground surface examination is determined through the objectively unbiased use of numerical criteria. The use of such a sample procedure eliminates subjective survey determination, which may be biased by preconceived ideas of where heritage sites may occur and subsequently, where to survey in the field.

Projectile point: Spear point, dart point, or arrow point. Implement usually attached to a wooden shaft to provide a point for penetration.

Promontory: A high ridge of land or rock jutting out into a lake or above the surrounding terrain. Such locales of view and vantage points.

Provenience: The location of an artifact described in terms of map grids, stratified levels, and/or depth from ground surface. This attribute is required for the graphic reconstruction of an excavated site.

Retouched flake: A flake that possesses a lateral edge that has been modified (sharpened by removal of very small flakes) by use in function or by intentional secondary flake removal.

Temporal control: Being able to isolate an event in time with relative or absolute control.

Tool: An artifact showing evidence of intentional use. Includes knives, scrapers, drillers, hammerstones, etc.

Utilized flake: Any piece of stone removed from a larger mass by the application of force - either intentional, accidental, or by nature - that is utilized as an artifact.

(Sources: Crabtree [1972]; Jenners, [1974]; Petro-Canada [1982])

APPENDIX 2: RESOURCE PERSONS FOR FUTURE HERITAGE STUDIES

1. Harry Haines
   General Delivery
   Tatlayoko Lake, B. C.
   - Long time resident of the area.

2. Scotty Shields
   General Delivery
   Tatlayoko Lake, B. C.
   - Long time resident of the area.

3. Marty Moore
   General Delivery
   Tatlayoko Lake, B. C.
   - Local rancher and logger. Maintains interest in region prehistory and history.

4. Jerry Bracewell
   General Delivery
   Tatlayoko Lake, B. C.
   - Long time resident of the area.

5. Ken Taylor
   General Delivery
   Kleena Kleen, B. C.
   - Long time resident of the area. Guide on 1928 Water Rights Survey